# Kimberley IRP

## Biological Survey

Horizon Power

25 July 2024

→ **The Power of Commitment**



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# Executive Summary

Horizon Power is proposing Future Energy Systems for four communities in the Kimberley region of Western Australia (WA). For the Kimberley Integrated Resource Planning (IRP) Project, Horizon Power is proposing to install renewable energy facilities and associated infrastructure in the towns of Camballin/Looma, Derby, Broome and Halls Creek.

GHD Pty Ltd (GHD) have been commissioned to undertake a Detailed (single season) flora and vegetation survey and a Basic and Targeted fauna survey of the proposed sites (the survey areas).

**Vegetation and Flora**

- Twelve vegetation types aligning with broad landforms were identified and described in the survey areas, not including cleared areas for tracks, or weed dominated patches.
- A total of 364 vascular flora species from 62 families and 178 genera (including subspecies and variants) were recorded across all sites.
- No *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) or *Biodiversity Conservation Act 2016* (BC Act) listed flora were recorded from any of the survey areas.
- Ten Department of Biodiversity, Conservation and Attractions (DBCA) listed Priority flora species were recorded from the survey areas.
- No Threatened Ecological Communities (TECs) listed under the EPBC Act or BC Act were recorded from any of the survey areas.
- Two DBCA listed Priority Ecological Communities (PECs) were recorded from the survey areas.
- Two Declared Pests (DP) listed under the *Biosecurity and Agriculture Management Act 2007* (BAM Act) were recorded within the survey areas.
- One Weed of National Significant (WoNS) was recorded within the survey areas.

<u>Camballin/Looma</u>

*Vegetation*

- No TECs listed under EPBC Act or BC Act or PECs listed by DBCA were identified within the Camballin/Looma survey area.
- One vegetation type was recorded
- The majority of vegetation at Camballin/Looma is in Excellent condition (3.53 ha, 69.46%).

*Flora*

- One DBCA listed priority flora taxa, *Polymeria* ?sp. Broome (K.F. Kenneally 9759) (P3) was tentatively recorded from the Camballin/Looma survey area.
- A total of 46 vascular flora species from 25 families and 40 genera (including subspecies and variants) were recorded from the Camballin/Looma survey area.
- Two introduced flora species representing 4% of the total flora were recorded.
- No DP or WoNs were recorded.

<u>Derby</u>

*Vegetation*

- No TECs listed under the EPBC Act or BC Act or PECs listed by DBCA were identified within the Derby survey area during the field survey.
- Three vegetation types were recorded

– The vegetation of the Derby survey area ranged from Very Good to Completely Degraded (cleared roadsides with regrowth of native forbs and grasses).
– The majority of the survey area was in Very Good condition (514.55 ha / 78.47%)

*Flora*

– One DBCA listed priority flora species, *Haemodorum capitatum* (P1), was recorded from the Derby survey area.
– A total of 136 vascular flora species from 39 families and 91 genera (including subspecies and variants) were recorded from the Derby survey area.
– Ten introduced flora species representing 7% of the total flora were recorded.
– Two DP were recorded, with one also listed as a WoNS:
    - **Azadirachta indica* (Neem) DP
    - **Jatropha gossypiifolia* (Bellyache Bush, Cotton-leaf Physic Nut) DP and WoNS.

Broome

*Vegetation*

– No TECs listed under the EPBC Act or BC Act were recorded within the Broome survey area during the field survey.
– One PEC listed by DBCA was recorded within the Broome survey area:
    - Relict dune system dominated by extensive stands of Minyjuru (Mangarr – *Sersalisia sericea*) (Priority (P)1 PEC) was recorded across 44.35 ha (4.48%) of the survey area
– Four vegetation types were recorded:
– Vegetation of the Broome survey area ranged from Excellent to Completely Degraded.
– The majority of the survey area was in Excellent condition (923.80 ha / 93.42%).

*Flora*

– Seven DBCA listed priority flora species were recorded from the Broome survey areas including:
    - *Bonamia oblongifolia* (P3)
    - *Acacia monticola x tumida* var. *kulparn* (P3)
    - *Glycine pindanica* P3
    - *Jacquemontia* sp. Broome (A.A. Mitchell 3028) (P1)
    - *Polymeria* sp. Broome (K.F. Kenneally 9759) (P3)
    - *Terminalia kumpaja* (P3)
    - *Corymbia ? paractia* (P1)
– A total of 174 vascular flora species from 48 families and 118 genera (including subspecies and variants) were recorded from the Broome survey area.
– Fourteen introduced flora species representing 8% of the total flora were recorded.
– One DP was recorded: **Azadirachta indica* (Neem).

Halls Creek

*Vegetation*

– No TECs listed under the EPBC Act or BC Act were recorded within the Halls Creek survey area during the field survey.
– One PEC listed by DBCA was recorded within the Halls Creek survey area:
    - Kimberley Vegetation Association No. 834 (P3 PEC) was recorded across 118.157 ha / 60.79% of the survey area.

– Four vegetation types were recorded
– Vegetation of the Halls Creek survey area ranged from Excellent to Degraded.
– The majority of the survey area was in Excellent condition (125.5 ha / 64.58%)

*Flora*

– One DBCA listed priority flora species was recorded from the Halls Creek survey area:
  - *Goodenia crenata* (P3).
– A total of 135 vascular flora species from 39 families and 93 genera (including subspecies and variants) were recorded from the Halls Creek survey area.
– Nine introduced flora species representing 7% of the total flora were recorded.
– One DP was recorded: **Azadirachta indica* (Neem).

**Fauna**

– 13 broad fauna habitat types were identified and mapped within the survey area (excluding cleared and degraded areas)
– A total of 179 fauna species, including 102 birds, 45 reptiles, 26 mammals, and 4 amphibia were identified across all sites
– 9 significant fauna species were recorded from the survey areas, this included seven listed under the EPBC Act (1 Critically Endangered, 1 Endangered, 3 Vulnerable and 2 Migratory under International Agreement) and two DBCA Priority-listed species (P1 and P2)
– 6 invasive species were recorded across all sites, including one DP under section 12 of the BAM Act, the Cane Toad (*Rhinella marina*), recorded at Derby and Halls Creek sites.

Camballin

The Camballin survey identified a total of 25 species, including 20 birds, 2 mammals and 3 reptiles. Of these, one species was introduced, the Donkey (*Equus asinus*).

No significant fauna were recorded at Camballin.

Derby

The Derby survey identified a total of 90 species, including 61 birds, 13 mammals, 14 reptiles, and 2 amphibians. Of these, four are introduced species, including the Black Rat (*Rattus rattus*), Cat (*Felis catus*), Dog (*Canis familiaris*) and Cane Toad (*Rhinella marina*).

The Derby survey recorded the following 4 significant fauna species:

– Northern Blue-tongue Skink (*Tiliqua scincoides intermedia*) – Critically Endangered under EPBC Act
– Northern Coastal Free-tailed Bat (*Ozimops cobourgianus*) – Priority 1 on the DBCA priority fauna list
– Fork-tailed Swift (*Apus pacificus*) – Migratory species under EPBC and BC Acts
– Oriental Cuckoo (*Cuculus optatus*) – Migratory species under the EPBC and BC Acts.

Broome

The Broome survey recorded a total of 115 fauna species during the surveys. This total included 73 birds, 9 mammals, 30 reptiles, and 3 amphibians. Of these species recorded, three are introduced species, which included the Dingo (*Canis familiaris*), recorded on one camera at Site H, and observed at Site G, the Cat (*Felis catus*) and Cattle (*Bos taurus*).

The Broome survey recorded the following 7 significant fauna species:

– Northern Blue-tongue Skink (*Tiliqua scincoides intermedia*) – Critically Endangered under EPBC Act
– Bilby (*Macrotis lagotis*) – Vulnerable under EPBC and BC Acts
– Northern Brushtail Possum (*Trichosurus vulpecula arnhemensis*) - Vulnerable under EPBC and BC Acts

– Bare-rumped Sheath-tailed Bat (*Saccolaimus saccolaimus*) – Vulnerable under EPBC Act and Priority 3 under BC Act
– Fork-tailed Swift (*Apus pacificus*) – Migratory species under EPBC and BC Acts
– Northern Coastal Free-tailed Bat (*Ozimops cobourgianus*) – Priority 1 on the DBCA priority fauna list
– Yellow-lipped Cave Bat (*Vespadelus douglasorum*) – Priority 2 on the DBCA priority fauna list

Halls Creek

The Halls Creek survey recorded a total of 69 species, including 45 birds, 17 mammals, 6 reptiles and one amphibian. Of these, three are introduced species, the Dingo (*Canis familiaris*), the Cat (*Felis catus*) and the Cane Toad (*Rhinella marina*).

The Halls Creek survey recorded the following 3 significant fauna species:

– Gouldian Finch (*Chloebia gouldiae*) – Endangered under the EPBC Act and P4 on the DBCA priority fauna list
– Northern Coastal Free-tailed Bat (*Ozimops cobourgianus*) – Priority 1 on the DBCA priority fauna list
– Yellow-lipped Cave Bat (*Vespadelus douglasorum*) – Priority 2 on the DBCA priority fauna list.

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# 1 Introduction

## 1.1 Background

Horizon Power is proposing Future Energy Systems for four communities in the Kimberley region of Western Australia (WA). For the Kimberley IRP Project, Horizon Power is proposing to install future energy systems in the towns of:

– Broome
– Derby
– Halls Creek
– Camballin/Looma

Construction of new power stations including centralised renewable generation will likely require the clearing of native vegetation for the construction footprint, network connection, access tracks, ancillary infrastructure and any operational and maintenance related activities including fire breaks.

The clearing footprint is typically expected to be substantially less than the survey area, comprising a combination of permanent cleared areas (e.g. for fire breaks and maintenance access) and temporarily cleared areas (e.g. construction access and laydown). Several options have been surveyed for each town (with the exception of Looma/Camballin), to identify environmental constraints and aid in site selection for the future energy system.

GHD Pty Ltd (GHD) have been commissioned to undertake a Detailed (single season) flora and vegetation survey and a Basic and Targeted fauna survey of the proposed sites (the survey areas).

## 1.2 Purpose of this report

The purpose of the flora, vegetation and fauna assessment is to define sensitive environmental values, in particular their spatial location and conservation significance, so the impacts of the proposed works can be managed to inform site selection, subsequent approvals and works to be undertaken. The outcomes of the assessment will be used to inform the project design and provide information to support a native vegetation clearing permit application under Part V of the *Environmental Protection Act 1986* (EP Act).

## 1.3 Location

### 1.3.1 Survey areas

The survey areas are located in the Kimberley region of WA. Each survey site and the approximate area in hectares (ha) is:

– Camballin/Looma (5.082 ha total) including Site C (4.282 ha) and road access (0.8 ha)
– Derby (655.69 total ha) including Connection Route (44.97 ha), Sites C (129.95 ha), D (180.01 ha), I (26.66 ha), O (38.17 ha) and P (235.91 ha)
– Halls Creek (195.14 total ha) including Connection Route (25.74 ha), Site C (42.5 ha) and Subsite C3 (126.11 ha)
– Broome (988.84 total ha) including Site F (506.05 ha) and Site F Connection (42.07 ha), and Site G (222.82 ha), Site H (193.97) and Site G&H Connection (23.94 ha).

The survey areas have been provided in Figure 1 (Camballin), Figure 7 (Derby), Figure 13 (Broome), and Figure 19 (Halls Creek), Appendix A.

### 1.3.2 Study areas

A study area was defined for the desktop-based searches of the assessment and consists of a 20 km buffer of each of the survey areas.

## 1.4 Scope of works

The scope of works for the project included the following:

– A desktop assessment of environmental constraints including flora and fauna database searches
– A Detailed and Targeted flora and vegetation survey and a Basic and Targeted fauna survey of sites in Broome, Derby, Halls Creek, and Camballin/Looma.
– A concise consolidated technical report (this report) outlining the methods and results of the surveys, including figures to present the spatial survey data
– A consolidated Index of biodiversity surveys for assessment (IBSA) compliant spatial data package.

## 1.5 Relevant legislation, conservation codes and background information

In Western Australia, some ecological communities and flora are protected under both Federal and State Government legislation. In addition, regulatory authorities also provide a range of guidance and information on expected standards and protocols for environmental surveys.

An overview of key legislation and guidelines, conservation codes and background information relevant to this biological survey are provided in Appendix B.

## 1.6 Report limitations and assumptions

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

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

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

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

# 2 Methods

## 2.1 Desktop assessment

Prior to the field survey a desktop assessment of the study area to identify environmental values and constraints was undertaken by viewing geographic information system (GIS) spatial files largely sourced from Government of Western Australia (GoWA) (2024) and reviewing publicly available, government managed databases. The information sources utilised in this assessment are presented below in Table 1.

*Table 1 Desktop information sources*

| Aspect | Information source/Government Dataset |
|---|---|
| Climate | Bureau of Meteorology (BoM) Climate Data Online (2024) |
| Geology, land systems and soil | 1:500 000 State linear structures layer (DMIRS-015)<br>Soil Landscape Mapping – Systems (DPIRD-064) |
| Environmentally Sensitive Areas (ESAs) | Clearing Regulations - Environmentally Sensitive Areas (DWER-046) |
| Conservation reserves and areas | DBCA – Legislated Lands and Waters (DBCA-011)<br>DBCA – Lands of Interest (DBCA-012) |
| Hydrology | Public Drinking Water Source Areas (DWER-033)<br>RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)<br>RIWI Act, Groundwater Areas (DWER-034)<br>RIWI Act, Rivers (DWER-036)<br>Waterways Conservation Act Management Areas (DWER-072)<br>Ramsar Sites (DBCA-010)<br>Directory of Important Wetlands in Australia - Western Australia (DBCA-045) |
| Vegetation | Pre-European Vegetation (DPIRD-006)<br>Native Vegetation Extent (DPIRD-005) (GoWA 2024)<br>Statewide Vegetation Statistics (GoWA 2024) |
| Threatened and Priority Ecological Communities (TECs and PECs) | DBCA Threatened Ecological Community (TEC) and Priority Ecological Community (PEC) spatial dataset (DBCA 2024a)<br>Priority Ecological Communities for Western Australia Version 35 (DBCA 2023) |
| Fauna Diversity and Significant fauna | DCCEEW PMST database to identify fauna species listed under the EPBC Act potentially occurring within the study area (DCCEEW 2024)<br>DBCA *NatureMap* database (DBCA 2007-)<br>DBCA Threatened fauna database (DBCA 2024b) |
| Flora Diversity and Significant Flora | DBCA *NatureMap* database (DBCA 2007–)<br>DCCEEW PMST database to identify fauna species listed under the EPBC Act potentially occurring within the study area (DCCEEW 2024)<br>DBCA Threatened and Priority Flora and WA Herbarium databases (DBCA 2024c) |

### 2.1.1 Flora and vegetation

The flora and vegetation desktop assessment included a review of:

– The Department of Climate Change, Energy, the Environment and Water (DCCEEW) PMST to identify communities and species listed under the EPBC Act potentially occurring within the study area (DCCEEW 2024). (Appendix C)
– The DBCA Threatened and Priority Ecological Community (TECs and PECs) database for conservation significant communities present in the desktop study area (DBCA 2024a)

– The DBCA Threatened and Priority Flora and WA Herbarium databases for Threatened flora listed under the BC Act and listed Priority by the DBCA previously recorded in the desktop study area (DBCA 2024c)
– The DBCA *NatureMap* database for flora and fauna species previously recorded within the desktop study area (DBCA 2007-) (Appendix C)
– Aerial photography, geology/soils, land systems and hydrology information to provide background information on the variability of the environment and likely vegetation and habitat types present
– A flora likelihood of occurrence assessment (Appendix D).

### 2.1.2 Fauna

The fauna desktop assessment included a review of:

– Department of Climate Change, Energy, the Environment and Water (DCCEEW) Protected Matters Search Tool (PMST) database to identify fauna species listed under the *Environment Protection Biodiversity Conservation Act 1999* (EPBC Act) potentially occurring within the desktop study area (Appendix C)
– The DBCA Threatened and Priority Fauna database for the study area (DBCA 2024b)
– The DBCA *NatureMap* (DBCA 2007–) database for fauna species previously recorded within the study area (Appendix C). This database comprises the following composite datasets:
  - Atlas of Australian birds
  - Bird data -Birdlife Australia
  - Fauna Survey Returns Database (New)
  - WA Museum (WAM) databases (mammals, birds, reptiles)
– Aerial photography, geology/soils, land systems and hydrology information to provide background information on the variability of the environment and likely habitat types present
– A fauna likelihood of occurrence assessment (refer Appendix E).

## 2.2 Field survey

### 2.2.1 Survey timing and personnel

The field survey comprised a single-phase field program of Detailed and Targeted flora ad vegetation surveys, and Targeted and Basic fauna surveys.

The survey details per site are summarised in Table 2 below:

***Table 2 Field survey dates and details***

| Location | Survey type | Date | Personnel | Licence/permit number |
|---|---|---|---|---|
| Derby | Detailed Flora and vegetation and Targeted Flora | 18 to 23 and 25 March 2024 | Joel Collins<br>Pali Jayasekara | FB62000664<br>FB62000208-2 |
| | Targeted fauna survey | | Robert Browne-Cooper | |
| Camballin/Looma | Detailed Flora and vegetation and Targeted Flora | 24 March 2024 | Joel Collins | FB62000664 |
| | Targeted fauna survey | | Robert Browne-Cooper | |
| Broome | Detailed Flora and vegetation and Targeted Flora | 6 to 12 February 2024 | Angela Benkovic<br>Alex Sleep | FB62000080-3<br>FB62000557 |

| Location | Survey type | Date | Personnel | Licence/permit number |
|---|---|---|---|---|
| | | 6 to 12 March 2024 | Angela Benkovic<br>Alex Sleep<br>Luann Nilsson | FB62000080-3<br>FB62000557<br>FB62000665 |
| | Targeted fauna survey | 12 to 18 February 2024 | Erin Lynch<br>Glen Gaikhorst | |
| | | 6 to 12 March 2024 | Erin Lynch<br>Glen Gaikhorst<br>Sarah Flemington | |
| Halls Creek | Detailed Flora and vegetation and Targeted Flora | 22 to 26 April | Joel Collins<br>Rachael Graham | FB62000664<br>FB62000666 |
| | Targeted fauna survey | | Robert Browne-Cooper | |

### 2.2.2 Guiding documents

The survey methodology and data collection that GHD employed was conducted in accordance with:

- Environmental Protection Authority (EPA) Technical Guidance – *Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA 2016)
- EPA Technical Guidance – *Terrestrial vertebrate fauna surveys for environmental impact assessment* (2020)
- Department of Sustainability, Environment, Water, Population and Communities (DSEWPC) *Survey Guidelines for Australia's Threatened Mammals* (DSEWPC 2011a)
- DSEWPC *Survey Guidelines for Australia's Threatened Reptiles* (DSEWPC 2011b)
- DEHWA (2010) *Survey Guidelines for Australia's Threatened Bats*
- DBCA Guidelines for surveys to detect the presence of bilbies, and assess the importance of habitat in Western Australia (DBCA 2017).

### 2.2.3 Permits and animal ethics

DBCA licence were not required for the fauna survey, as fauna disturbance or trapping was not a survey requirement. Survey activities were undertaken in accordance with DBCA Standard Operating Procedures (SOPs) which were required to be followed under the conditions of GHD's fauna trapping permit. At the time of survey, compliance with these SOPs was accepted by DBCA as evidence of ethical treatment of animals.

### 2.2.4 Data collection

Field data collection for the flora, vegetation and fauna survey was undertaken using GPS enabled tablets using electronic forms in Collector and tailored to IBSA spatial data requirements. Data was synced to the cloud at the conclusion of each field day. Field photographs were stored and where applicable have been provided as part of the deliverables.

### 2.2.5 Identification and nomenclature

Fauna were identified in the field using reference books, field guides and electronic guides (Table 3). Where identification was not possible, specific publications were utilised or photographs of specimens were collected to be later identified. Nomenclature used in this report follows that used by WAM as reported on *NatureMap*. This nomenclature is deemed the most up-to-date species information for WA fauna.

*Table 3 Fauna identification references*

| Fauna group | Field guide |
|---|---|
| Mammals | Menkhorst and Knight (2010), Van Dyck and Strahan (2008) |
| Bats | Churchill (2008), Menkhorst and Knight (2010) |
| Birds | Morcombe (2004) |
| Reptiles | Wilson and Swan (2020), Storr *et. al.* (1999) |
| Amphibians | Tyler and Doughty (2009) |

A flora inventory was compiled from taxa listed in described quadrats, relevés and from opportunistic floristic records throughout the survey area. Species that were well known to the survey ecologists were identified in the field; all other species were collected and assigned a unique collection number to facilitate tracking. All specimens collected during the field assessment were dried and processed in accordance with the requirements of the WA Herbarium. Species were identified by the use of taxonomic literature, electronic keys and online electronic databases. Specimen identification was undertaken by Frank Obbens, Sharnya Yates and Pali Jayasekara, with a number of specimens also submitted to WA Herbarium for identification.

The conservation status of all recorded flora was compared against the current lists available on FloraBase (Western Australian Herbarium 2024) and the EPBC Act Threatened species database.

Nomenclature used in this report follows that used by the WA Herbarium as reported on FloraBase (Western Australian Herbarium 2024).

### 2.2.6 Detailed and Targeted flora and vegetation survey

The field survey was undertaken to identify and describe the broad dominant vegetation types, assess vegetation condition, and high intensity sampling of vascular flora taxa present at the time of survey. Searches for significant ecological communities and flora species were also undertaken during the field survey.

Field survey methods involved a combination of high intensity quadrat sampling and traversing the survey area by foot. Quadrats were conducted with each survey area to describe the broad-scale vegetation and physical features. The transect effort is presented in Figure 3 (Camballin), Figure 9 (Derby), Figure 15 (Broome), and Figure 21 (Halls Creek), Appendix A.

The following number of quadrats and/or relevés were conducted across each survey site:

– Derby: 15 quadrats and 2 relevés
– Camballin/Looma: 2 quadrats
– Broome: 18 quadrats, and 5 relevés
– Halls Creek: 3 quadrats and 1 relevé

The quadrat and releve locations are presented in separate figures per survey site (Figure 4 (Camballin), Figure 10 (Derby), Figure 16 (Broome), and Figure 22 (Halls Creek), Appendix A) for each survey area. The raw sampling data has been provided in Appendix C.

### 2.2.7 Additional local tree survey (Derby)

For the Derby survey area only, in response to community requests, additional tree species were recorded that were mature and of a large size. The tree species opportunistically recorded were *Adansonia gregorii* (Boab), *Bauhinia cunninghamii, Corymbia* sp. and *Eucalyptus* sp. above the size of 300 mm Diameter at Breast Height (DBH).

### 2.2.8 Basic and Targeted fauna survey

The Basic and Targeted fauna surveys were completed in association with the flora and vegetation surveys at each site. The survey areas were traversed by foot to identify and describe dominant fauna habitat types present, and their condition, and to assess habitat for significant fauna. Targeted assessments specific for the Bilby (*Macrotis lagotis*), and Northern Brush-tail Possum (*Trichosurus vulpecula arnhemensis*), and Northern Blue-

tongue Skink (*Tiliqua scincoides*) were undertaken at all sites, Northern Quoll (*Dasyurus hallacatus*) at Derby and Halls Creek sites, Ghost Bat (*Macroderma gigas)* at the Halls Creek and Camballin sites, and the Northern Western Free-Tailed Bat (*Ozimops cobourgianus*, at the Broome site only. The Basic assessment also identified and recorded all fauna occurring in the area at the time of the survey.

#### 2.2.8.1 Habitat assessment

A fauna habitat assessment was undertaken to document and map the type, ecological value and extent of habitats throughout the survey area. The following information was recorded for each habitat assessment:

- Habitat structure (e.g. vegetation type, presence/absence of structural layers such as ground cover and midstorey)
- Presence/absence of refuge including density of ground covers, fallen timber (course woody debris), rocks/boulder piles, and the type and extent of each refuge
- Presence/absence of waterways including type, extent and habitat quality within waterway
- Location of the habitat within the survey area in comparison to the habitat within the surrounding landscape
- Habitat connectivity and identification of wildlife corridors within and immediately adjacent to the survey area
- Current land use and disturbance history
- Evaluation of key habitat features and types identified during the desktop assessment relevant to significant fauna
- Evaluation of the likelihood of occurrence of significant fauna within the habitat (based on presence of suitable habitat)
- A representative photograph of each habitat-type.

#### 2.2.8.2 Opportunistic searches

Opportunistic fauna searches were conducted across the survey area. This included:

- Searching the survey area for tracks, scats, bones, diggings and feeding areas for native and feral species
- Searching through microhabitats including examining termite mounds, tree hollows and hollow logs and turning over leaf litter
- Visual and aural surveys, which accounted for all the bird species recorded utilising the habitats of the survey area at that time
- Recording GPS locations of significant fauna species.

#### 2.2.8.3 Remote cameras

Remote motion sensitive cameras were deployed in areas of suitable habitat to target fauna of conservation significance including Bilby, Northern Brushtail Possum and Northern Quoll. Selected locations for camera placement depended on habitat availability and habitat preferences of target species including at the base of hollow-bearing trees and logs (for Northern Brushtail Possum), at sandy ridges/dunes or sand plains (for Bilby) and drainage lines or rocky outcrops (for Northern Quoll).

Cameras were not baited for this survey and focused on instead targeting locations of species activity (tracks, scats, burrows or tree scratches). The cameras were set for a maximum of 17 nights (in Broome) and a minimum of 2 nights at other sites (due to size of the site and survey time allocation). No cameras were set out at Camballin due to the small size of the site that contained one habitat type that was sufficiently covered through transects and habitat assessments. Opportunistic fauna image captures were recorded incidentally and included in the total species list (Appendix E).

The total trap nights and dates for each camera set out at Derby is provided in Table 4 below.

***Table 4 Remote camera trap effort - Derby***

| Camera ID | Set date | End date | Trap nights | Site | Lat | Long | Location |
|---|---|---|---|---|---|---|---|
| Cam 4 | 19/3/2024 | 23/3/2024 | 4 | P | -17.3622838 | 123.69568 | Open woodland sandplain |

| Camera ID | Set date | End date | Trap nights | Site | Lat | Long | Location |
|---|---|---|---|---|---|---|---|
| Cam 1 | 19/3/2024 | 23/3/2024 | 4 | P | -17.37368 | 123.69557 | Open woodland sandplain |
| Cam115 | 20/3/2024 | 23/3/2024 | 3 | D | -17.33490 | 123.67326 | Open woodland sandplain |
| Cam G | 20/3/2024 | 23/3/2024 | 3 | D | -17.34277 | 123.66880 | Open woodland sandplain |
| Cam 24 | 20/3/2024 | 24/3/2024 | 4 | C | -17.34226 | 123.65903 | Open woodland sandplain |
| Cam 29 | 21/3/2024 | 24/3/2024 | 3 | C | -17.33361 | 123.65675 | Open woodland sandplain |
| Cam 77 | 21/3/2024 | 24/3/2024 | 3 | I | -17.35608 | 123.67179 | Open woodland sandplain |
| Cam 6 | 21/3/2024 | 24/3/2024 | 3 | I | -17.35248 | 123.67086 | Open woodland sandplain |
| Cam 13 | 21/3/2024 | 24/3/2024 | 3 | D | -17.33430 | 123.66465 | Open woodland sandplain |
| Cam 27 | 22/3/2024 | 24/3/2024 | 2 | O | -17.31526 | 123.65764 | Open woodland sandplain |
| **Total trap nights** | | | **32** | | | | |

The total trap nights and dates for each camera set out at Halls Creek is provided in Table 5 below.

*Table 5 Remote camera trap effort – Halls Creek*

| Camera ID | Set date | End date | Trap nights | Site | Lat | Long | Location |
|---|---|---|---|---|---|---|---|
| Cam 115 | 23/04/2024 | 25/04/2024 | 2 | C | -18.22108 | 127.65714 | Minor drainage line |
| Cam 13 | 23/04/2024 | 25/04/2024 | 2 | C3 | -18.24739 | 127.64509 | Small termite mound |
| Cam 29 | 23/04/2024 | 25/04/2024 | 2 | C | -18.22778 | 127.65503 | Rocky hill |
| Cam 4 | 23/04/2024 | 25/04/2024 | 2 | C3 | -18.24705 | 127.64883 | Minor drainage line |
| Cam 6 | 23/04/2024 | 25/04/2024 | 2 | C | -18.23119 | 127.65634 | Small termite mound |
| Cam 77 | 23/04/2024 | 25/04/2024 | 2 | C3 | -18.24726 | 127.65404 | Minor drainage line |
| Cam b14 | 23/04/2024 | 25/04/2024 | 2 | C3 | -18.24196 | 127.654279 | Granite |
| Cam 1 | 23/04/2024 | 25/04/2024 | 2 | C3 | -18.24082 | 127.65133 | Small termite mound |
| Cam166 | 23/04/2024 | 25/04/2024 | 2 | C | -18.22877 | 127.65931 | Eucalyptus on stony plain |
| Cam24 | 23/04/2024 | 25/04/2024 | 2 | C | -18.22368 | 127.65914 | Eucalyptus on stony plain |
| **Total trap nights** | | | **20** | | | | |

The total trap nights and dates for each camera set out at Broome is provided in Table 6 below.

*Table 6 Remote camera trap effort – Broome*

| Camera ID | Set date | End date | Trap nights | Site | Lat | Long | Location |
|---|---|---|---|---|---|---|---|
| HF10 | 12/2/2024 | 18/2/2024 | 6 | H | -17.93000 | 122.29654 | Pindan |
| HF10 | 18/2/2024 | 6/3/2024 | 17 | H | -17.92570 | 122.30519 | Pindan |
| HF10 | 7/3/2024 | 9/3/2024 | 2 | F | -17.88361 | 122.28204 | Pindan |
| HF10 | 9/3/2024 | 12/3/2024 | 3 | F | -17.88416 | 122.28603 | Pindan |
| P5 | 12/2/2024 | 18/2/2024 | 6 | G | -17.90078 | 122.29295 | Pindan |
| P5 | 18/2/2024 | 6/3/2024 | 17 | G | -17.90121 | 122.29476 | Pindan amongst large trees |
| P5 | 7/3/2024 | 12/3/2024 | 5 | F | -17.87677 | 122.27985 | Pindan- fence line |
| W4 | 7/3/2024 | 12/3/2024 | 5 | F | -17.84190 | 122.28354 | Pindan |
| W13 | 12/2/2024 | 18/2/2024 | 6 | G | -17.92271 | 122.29575 | Pindan |

| Camera ID | Set date | End date | Trap nights | Site | Lat | Long | Location |
|---|---|---|---|---|---|---|---|
| W13 | 18/2/2024 | 6/3/2024 | 17 | G | -17.91377 | 122.29260 | Pindan |
| W13 | 6/3/2024 | 12/3/2024 | 6 | F | -17.88353 | 122.28231 | Pindan - track |
| W4 | 12/2/2024 | 18/2/2024 | 6 | H | -17.92410 | 122.29214 | In disturbed area large trees |
| W4 | 18/2/2024 | 6/3/2024 | 17 | H | -17.93356 | 122.29274 | Pindan on large log |
| **Total trap nights** | | | **113** | | | | |

### 2.2.8.4 Bat ultrasound recorders

SM4 ® and Anabat Swift bat call detectors were set for general bat activity and to target the Northern Western free-tailed bat (*Ozimops cobourgianus*) and the Ghost bat (*Macroderma gigas*). Detector locations were selected as suitable based on water present, flyways and potential cave-forming rocky areas where present.

The total trap nights per recorder for Broome is presented in Table 7 below.

*Table 7 Bat ultrasound recorder - Broome*

| Recorder ID | Set date | End date | Trap nights | Site | Lat | Long | Location |
|---|---|---|---|---|---|---|---|
| Swift 1 | 6/03/2024 | 7/03/2024 | 1 | Site F (south) | -17.912147 | 122.248468 | Pindan |
| Swift 1 | 7/03/2024 | 8/03/2024 | 1 | Site F (south) | -17.883613 | 122.282038 | Pindan |
| Swift 1 | 8/03/2024 | 10/03/2024 | 2 | Site F (north) | -17.840133 | 122.287608 | Pindan |
| Swift 1 | 10/03/2024 | 12/03/2024 | 2 | Site F (central) | -17.872405 | 122.278393 | Pindan |
| Swift 2 | 9/03/2024 | 11/03/2024 | 2 | Site F (north) | -17.840285 | 122.287495 | Pindan |
| Swift 2 | 14/02/2024 | 16/02/2024 | 2 | Site G (south) | -17.923722 | 122.29747 | Pindan |
| Swift 2 | 16/02/2024 | 18/02/2024 | 2 | Site G (north) | -17.901078 | 122.292393 | Pindan |
| Swift 1 | 15/02/2024 | 17/02/2024 | 2 | Site G (south) | -17.923798 | 122.297322 | Pindan |
| Swift 1 | 17/02/2024 | 19/02/2024 | 2 | Site G (north) | -17.901097 | 122.292352 | Pindan |
| Swift 1 | 12/02/2024 | 14/02/2024 | 2 | Site H | -17.930003 | 122.29654 | Pindan |
| Swift 2 | 13/02/2024 | 14/02/2024 | 1 | Site H | -17.932602 | 122.303438 | Pindan |
| **Total trap nights** | | | **19** | | | | |

The total trap nights per recorder for Derby is presented in Table 8 below.

*Table 8 Bat ultrasound recorder – Derby*

| Recorder ID | Set date | End date | Trap nights | Site | Lat | Long | Location |
|---|---|---|---|---|---|---|---|
| SM4-7 | 18/3/2024 | 20/3/2024 | 2 | P | 17.36943 | 123.68560 | edge of clearing flyway, open woodland on sandplain |
| SM4-7 | 20/3/2024 | 22/3/2024 | 2 | D | 17.33930 | 123.66895 | edge of waterbody flyway, flooded gravel pit, open woodland on sandplain |
| SM4-6 | 18/3/2024 | 20/3/2024 | 2 | I | 17.35113 | 123.66869 | edge of clearing flyway, tall open woodland on sandplain |
| SM4-6 | 20/3/2024 | 22/3/2024 | 2 | C | 17.33818 | 123.65582 | edge of clearing flyway, tall open woodland on sandplain |
| SM4-6 | 22/3/2024 | 24/3/2024 | 2 | O | 17.31382 | 123.65972 | edge of clearing flyway, tall open woodland on sandplain |
| **Total trap nights** | | | **10** | | | | |

The total trap nights per recorder for Halls Creek is presented in Table 9 below.

*Table 9 Bat ultrasound recorder – Halls Creek*

| Recorder ID | Set date | End date | Trap nights | Site | Lat | Long | Location |
|---|---|---|---|---|---|---|---|
| SM4-7 | 23/4/2024 | 25/4/2024 | 2 | C3 | -18.24176 | 127.65229 | Stony low rise |
| SM4-6 | 23/4/2024 | 25/4/2024 | 2 | C | -18.22107 | 127.65782 | Set on flowing drainage line |
| **Total trap nights** | | | **4** | | | | |

When analysing bat call recordings, a confidence rating (Mills et al. 1996 & Duffy et al. 2000) is applied for species, as not all species are able to be identified when there is overlap of species occurrences in an area, that that have similar call pulses/frequency. The quality of the calls recorded with the detector can also be a factor in reducing the confidence of species identification. Table 10 below defines the abbreviations used in the call results.

*Table 10 Confidence ratings applied to calls*

| Identification | Description |
|---|---|
| D – Definite | Species identification not in doubt |
| PR – Probable | Call most likely to present a particular species, but there exists a low probability of confusion with species of similar call type, or call lacks sufficient detail. |
| SG – Species Group | Call made by one of two or more species. Call characteristics overlap, particularly poor quality calls or mixed species calls make it difficult to distinguish between species. For example:<br>– *Chaerephon jobensis* and *Saccolaimus flaviventris*<br>– *Taphozous georianus* and *Taphozous hilli*<br>– *Nyctophilus* sp. The calls of *Nyctophilus geoffroyi, N. daedalus,* and *N. arnhemensis* |

### 2.2.8.5 Targeted fauna surveys

The targeted transects for the Bilby and Northern Brushtail Possum are presented in Figure 3 (Camballin), Figure 9 (Derby), Figure 15 (Broome), and Figure 21 (Halls Creek), Appendix A.

**Bilby (*Macrotis lagotis*)**

The Bilby is recognised as a locally and regionally significant species in the southwest Kimberley desert country in Western Australia and requires targeted surveys. The sampling technique endorsed by the DAWE, references Southgate's methods of Bilby Plot Assessments (Southgate et al. 2005), and the DBCA guidelines (DBCA 2017). This method is applied to relatively small survey area (less than 5 ha) or to those where the survey area can be adequately covered on foot, and involves a transect assessment of the entire survey area. For larger survey areas the approach is to search 2 ha plots.

The approach for this survey was to undertake transects using the above method across each survey area to detect any Bilby burrows of resident animals or secondary signs of recent Bilby activity such as tracks, scats and foraging digs based on the Southgate method.

Searching was undertaken by GHD Principal zoologist Glen Gaikhorst, and Senior zoologists Robert Browne-Cooper, Erin Lynch and Sarah Flemington. Search transect walks were completed across the entirety of the survey sites where vegetation density permitted, with space between transects approximately 100 m apart.

During the traverses, various information on the habitat characteristics was recorded in an excel spreadsheet on the handheld Tablet device to complete the Plot Assessments. The Plot Assessments when completed, provide two values that assess the trackability of Bilby, and the availability of Other Determining Signs (ODS), which will reflect if Bilby were able to be detected (if they were present) in the area. The plots provide an overall assessment of each of the survey sites. The Plot Assessment method was undertaken at Derby, Halls Creek and Camballin, whilst the transect method was undertaken at Broome. The results and the information recorded for the Plot Assessments during the survey, is provided in Appendix E.

In Broome, a total of 53 transects were walked (spaced at 100 m apart) at Site F and transects spaced at 70 m for Sites G and H covering the boundaries.

The total number of Bilby plot assessments and their location at Derby and Camballin is provided in Table 11 below. Habitat assessments were also conducted at these locations.

*Table 11 Bilby plot assessment locations – Derby and Camballin*

| Method | ID | Date | Site | Lat | Long | Location |
|---|---|---|---|---|---|---|
| Bilby search plot / Habitat assessment | BIL 1 | 19/3/2024 | P | -17.36851 | 123.69602 | Open woodland on sandplain |
| Bilby search plot / Habitat assessment | BIL 2 | 19/3/2024 | P | -17.37238 | 123.68566 | Open woodland on sandplain |
| Bilby search plot / Habitat assessment | BIL 3 | 20/3/2024 | D | -17.33769 | 123.67226 | Open woodland on sandplain |
| Bilby search plot / Habitat assessment | BIL 4 | 20/3/2024 | C | -17.33950 | 123.66041 | Open woodland on sandplain |
| Bilby search plot / Habitat assessment | BIL 5 | 21/3/2024 | C | -17.33359 | 123.65787 | Open woodland on sandplain |
| Bilby search plot / Habitat assessment | BIL 6 | 21/3/2024 | D | -17.34100 | 123.67159 | Open woodland on sandplain |
| Bilby search plot / Habitat assessment | BIL 7 | 21/3/2024 | I | -17.35330 | 123.67223 | Open woodland on sandplain |
| Bilby search plot / Habitat assessment | BIL 8 | 21/3/2024 | D | -17.33450 | 123.66666 | Open woodland on sandplain |
| Bilby search plot / Habitat assessment | BIL 9 | 22/3/2024 | O | -17.31560 | 123.65977 | Open woodland on sandplain |
| Bilby search plot / Habitat assessment | BIL 10 | 22/3/2024 | D | -17.33486 | 123.65922 | Open woodland on sandplain |
| Bilby search plot / Habitat assessment | BIL 11 | 24/3/2024 | Camballin | -18.02843 | 124.16140 | Open woodland on sandplain |

**Northern Brushtail Possum** (***Trichosurus vulpecula arnhemensis***)

The Northern Brushtail Possum occurs discontinuously from the Gulf of Carpentaria hinterland near Borroloola, Northern Territory (NT) and westward to the Kimberley, WA (Threatened Species Scientific Committee 2021). Targeted searches for suitable habitat trees for the Northern Brushtail Possum (Plate 1) were conducted at the Broome sites. This included recording all tall Eucalypt trees either already containing suitable hollows, or trees that may produce hollows in the future. Trees were also inspected for any nail scratch marks on the tree base, that might indicate the species has been utilising a tree. Suspected suitable trees were set up with a remote camera to potentially capture the species' activity during the night, and a Go-Pro camera and pole was used to inspect hollows for signs of use.



***Plate 1*** ***Suitable Northern Brushtail Possum habitat tree – Broome***

## 2.3 Limitations

### 2.3.1 Desktop limitations

The EPBC Act PMST is based on bioclimatic modelling for the potential presence of species. As such, this does not represent actual recorded locations of the species present within the survey area or wider study area. The records from Western Australian Government fauna data sources such as the DBCA searches of Threatened and Priority fauna provide more accurate information for the general area and local occurrence. The accuracy of these publicly available datasets are dependent on up-to-date data management via state government, and recent significant fauna records may be absent due to delayed database management. Additionally, some collections, sighting or trapping records are from historical sources and cannot be dated and often misrepresent the current range of Threatened and Priority species. Notwithstanding, questionable fauna records relevant to desktop assessments are interrogated on a case-by-case basis.

### 2.3.2 Field survey limitations

The EPA (2016, 2020) Technical Guidance states that flora and fauna survey reports for environmental impact assessment in WA should contain a section describing the limitations of the survey methods used. The limitations and constraints associated with this field survey are discussed in Table 12. Based on this assessment, the survey effort has not been subject to any major constraints, which affect the accuracy or thoroughness of the assessment or conclusions formed.

***Table 12 Field survey limitations***

| Aspect | Constraint | Comment |
|---|---|---|
| Sources of information and availability of contextual information. | Nil | Adequate information is available for the Survey Area, this includes:<br>Broadscale (1:1,000,000) mapping by Beard (1976) and digitised by Shepherd et al. (2002)<br>Database searches (DBCA and *NatureMap*). |
| Scope (what life forms were sampled etc.) | Nil | Significant terrestrial vertebrates were sampled during the survey. Basic fauna assessment sampled significant and non-significant species opportunistically. Terrestrial invertebrate fauna were not surveyed, nor were any freshwater or marine vertebrate species.<br>Vascular flora were sampled during the survey, non-vascular flora were not surveyed. |
| Proportion of flora collected and identified (based on sampling, timing and intensity) | Minor (Broome)<br>Nil (Camballin/Looma, Derby and Halls Creek) | **Camballin/Looma, Derby and Halls Creek**<br>Majority of flora were able to be identified to species level, and some only at genus level due to lack of flowering and/or fruiting material required for identification. None of these species are considered likely to be significant flora.<br>**Broome**<br>A total of 39 taxa were tentatively identified (nine to genus level, 30 to species level) due to insufficient material for identification (such as flowers/fruit, or due to insect damage). It is anticipated that the number of annual, forb and grass species recorded from Broome sites, in particular Sites G and H (surveyed in February) would be higher if the survey was conducted in better conditions. |
| Completeness and further work which might be needed (e.g. was the relevant area fully surveyed) | Nil | The survey area was considered adequately surveyed to compile a representative list of species, as well as to describe and map vegetation at a level appropriate for impact assessment and approval determination. |
| Mapping reliability | Minor | The survey was conducted using high-resolution aerial imagery obtained from Landgate, topographical features, previous vegetation mapping (Heddle *et al.* 1980 and Webb *et al.* 2016) and field data.<br>Data was recorded in the field using hand-held GPS tools (e.g. Samsung tablet, Garmin GPS). Certain atmospheric factors and other sources of error can affect the accuracy of GPS receivers, including tree canopies. |

| Aspect | Constraint | Comment |
|---|---|---|
| | | The Garmin GPS units used for this survey are accurate to within ±5 metres on average. Therefore, the data points consisting of coordinates recorded from the GPS may contain minor inaccuracies. |
| Timing/weather/ season/cycle | Minor (Broome, Derby)<br><br>Nil (Camballin/Looma, Halls Creek) | The field survey was conducted in February, March (Derby, Camballin/Looma, Broome) and April (Halls Creek). Surveys for Derby, Camballin/Looma and Broome were conducted within the recommended timing for primary surveys (wet season January to March) (EPA 2016). The Halls Creek survey was conducted just outside the recommended survey timing for primary survey, however, this was not a limitation due to the high rainfall received between January-March.<br>**Camballin/Looma**<br>Rainfall received in the three months prior to the survey was 349.6 mm, which was lower than the long term average of 511.1 mm (BoM 2024). While the rainfall was lower than the average it did not have a major impact on the survey outcomes as many species were still flowering/fruiting at the time of the survey, including annual species.<br>**Broome**<br>Conditions were dry during the February survey, with below average rainfall received in the months leading up to the survey. Rainfall received in the three months prior to the survey was 191.6 mm, which was lower than the long term average of 475.3 mm (BoM 2024). As a result of this few species were flowering and few annuals present / identifiable.<br>**Derby**<br>Rainfall received in the three months prior to the survey was 132.6 mm, which was lower than the long term average of 533.6 mm (BoM 2024). While several species were still flowering/fruiting at the time of the survey, the lower rainfall prior to the survey may have reduced the annuals present.<br>**Halls Creek**<br>Rainfall received in the three months prior to the survey was 964.5 mm, which was higher than the long term average of 441.3 mm (BoM 2024), As the rainfall was higher than the average there were no limitations on flowering/fruiting. |
| Disturbances (e.g. fire, flood, accidental human intervention) | Nil | No significant disturbances were encountered during the surveys. |
| Intensity (in retrospect, was the intensity adequate) | Nil | The vascular flora of the survey area was sampled in accordance with EPA (2016) and terrestrial fauna sampled in accordance with EPA (2020). The survey intensity was of suitable intensity for the size and location of the survey area. A minimum of three flora sample sites were located within each identified vegetation type, where possible. In some instances, less than three sites were described per vegetation type, this was due to the limited area and geographic range of the vegetation type and/or the degraded condition of the vegetation. The survey area was sufficiently covered by the GHD botanists and zoologists during the survey. |
| Resources | Nil | Adequate resources were employed during the field survey, as follows:<br>**Derby**<br>– Flora and vegetation: 14 field days<br>– Fauna: 7 field days<br>**Camballin/Looma**<br>– Flora and vegetation: one field day<br>– Fauna: one field day<br>**Broome**<br>– Flora and vegetation: 28 field days<br>– Fauna: 35 field days<br>**Halls Creek**<br>– Flora and vegetation: 10 field days<br>– Fauna: 5 field days. |

| Aspect | Constraint | Comment |
|---|---|---|
| Access restrictions | Nil | No access restrictions were encountered during the surveys. |
| Experience levels | Nil | The Senior Zoologists/Ecologists and Principal Zoologists who executed the survey are practitioners suitably qualified and experienced in their respective fields:<br>Technical Director Zoology/Principal Zoologist Glen Gaikhorst has over 25 years of experience undertaking fauna surveys with extensive experience undertaking fauna surveys in Broome.<br>Senior Zoologist, Robert Browne-Cooper, has more than 25 years of experience leading and conducting fauna surveys with extensive experience undertaking fauna surveys in the Kimberley region.<br>Technical Director Botany/Ecology/Ecology Team Lead<br>Senior Ecologist Erin Lynch has over 15 years of experience with fauna and ecology surveys with extensive experience undertaking fauna surveys in Broome.<br>Senior Botanists Alex Sleep, Angela Benkovic and Palitha (Pali) Jayasekera each have over 15 years of experience undertaking flora and ecology surveys, including several surveys in the Kimberley region.<br>Senior Ecologist Sarah Flemington has approximately 7 years of experience conducting targeted fauna and ecology surveys, including several surveys in the Broome region<br>Luann Nilsson and Rachael Graham are Graduate Ecologists/Botanists with approximately 1 years of experience in the field. |

# 3 Desktop assessment – Camballin/Looma

## 3.1 Location

The Camballin/Looma survey area is located in the West Kimberley district of WA, approximately 161 km southeast of Derby.

## 3.2 Physical environment

Ecological and land use constraints for the Camballin survey area are presented in Figure 2, Appendix A.

### 3.2.1 Climate

The Kimberley and specifically Dampierland regions experiences dry, hot and tropical conditions with semi-arid summer rainfall.

The rainfall data from the Liveringa weather station (no. 3100) located near Camballin for 2024, and the mean rainfall across all years has been summarised in the graph below (Plate 2) and Table 13. The nearest reliable data for temperature is at the Derby Aero (no. 3032) and is shown in Plate 2, and summarised in Table 13. The data shows there was higher than average rainfall in March 2024, but was below average for January and February.

The highest maximum temperature in 2024 at Derby was 38.5ºC in February, and the lowest minimum in 2024 was 22.6ºC.

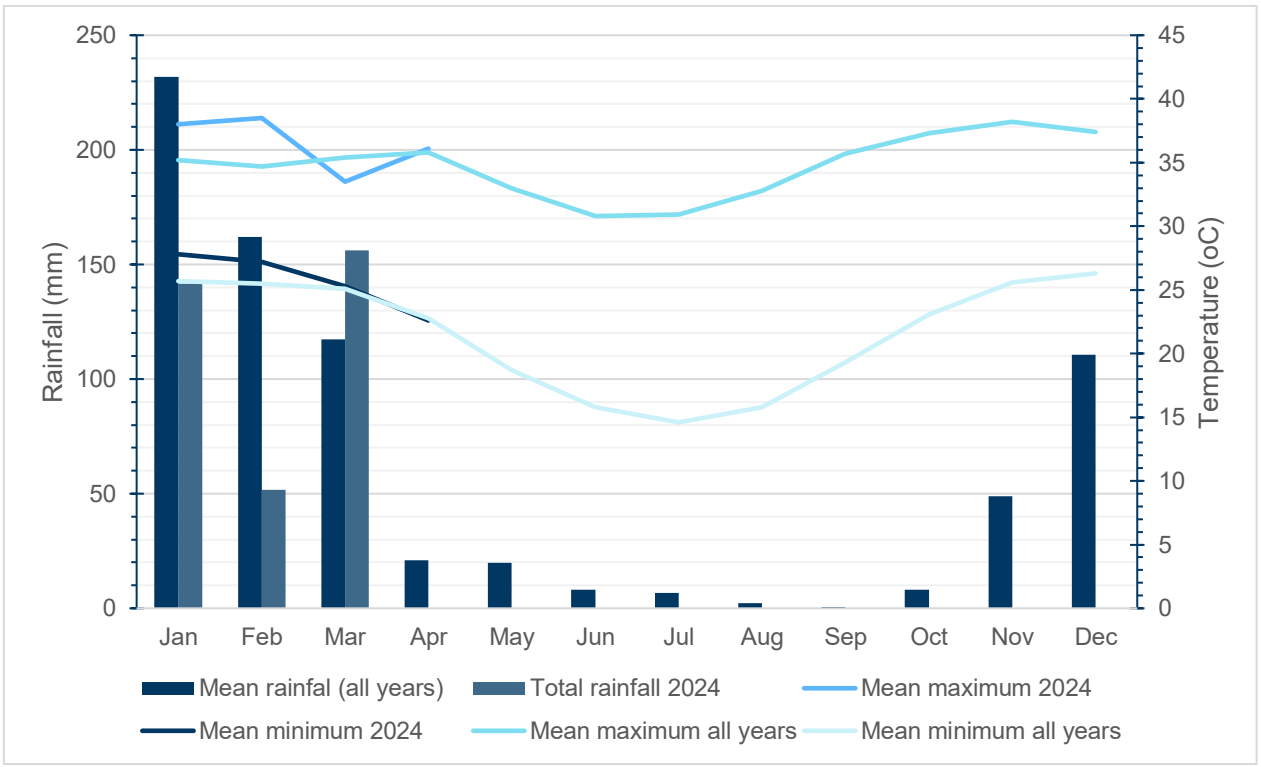



***Plate 2*** ***Climate data (BoM, 2024) for Camballin***

*Table 13 Climate data summary for Camballin/Looma*

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mean rainfall (all years) | 231.8 | 161.9 | 117.4 | 21 | 19.8 | 8.1 | 6.7 | 2.3 | 0.5 | 8.1 | 49 | 110.5 |
| Total rainfall 2024 | 141.6 | 51.8 | 156.2 | | | | | | | | | |
| Mean maximum 2024 | 38 | 38.5 | 33.5 | 36.1 | | | | | | | | |
| Mean minimum 2024 | 27.8 | 27.2 | 25.3 | 22.6 | | | | | | | | |
| Mean maximum (all years) | 35.2 | 34.7 | 35.4 | 35.8 | 33 | 30.8 | 30.9 | 32.8 | 35.7 | 37.3 | 38.2 | 37.4 |
| Mean minimum (all years) | 25.7 | 25.5 | 25.1 | 22.8 | 18.7 | 15.8 | 14.6 | 15.8 | 19.3 | 23.1 | 25.6 | 26.3 |

## 3.2.2 Geology, soils and land systems

The Kimberley region land systems have been mapped by the Department of Agriculture and Food Western Australia (Payne and Schoknecht, 2011). The Kimberley Region includes 111 land systems and covers 330,070 $km^2$.

The Camballin/Looma survey area is located within the St George Land System (Stg) which is characterised as a sandstone plateau and hill lands with open spinifex and stunted trees, and pindan on the sandplain. The geology is described as gently dipping sandstone, conglomerate, and shale of Permian and Jurassic age; Quaternary aeolian sands. A summary of the land system is provided in Table 14 below.

*Table 14 Descriptions of the Land system mapped within the Camballin survey area*

| Land system name | Landforms | Soils | Vegetation |
|---|---|---|---|
| St George Land System | **Rocky plateaux and hillslopes:** boulder-strewn plateau surfaces with benches escarpments and hillslopes up to 80%, and with basal scree slopes up to 45%, lower hillslopes to 10% and 1.6 m long, dissected up to 9 m, with laterite exposures locally | Mainly rock outcrop with some laterite | Open spinifex with scattered stunted trees grading into open woodlands. *Triodia intermedia* and *T. pungens communities* and *Corymbia dichromophloia* and *Adansonia gregorii* alliances |
| | **Sandplains:** up to 1.6 m in extent, slopes less than 1% attaining 2% locally. | Probably red sands of variable depth | Woodlands (pindan) with prominent *Acacia* tall shrub layer and *Triodia bitextura - Chrysopogon* spp. *C. dichromophloia – Adansonia gregorii* alliances |
| | **Sandplains with runon:** up to 1.6 km wide and extending downslope for up to 3.2 km; slopes less than 0.5%. | Mainly mottled yellowish sandy soils | Ribbon grass grassland with scattered trees and shrubs. *Chrysopogon* spp. community |
| | **Drainage floors:** up to 800 m wide, gradients 1 in 100 to 1 in 500; marginal slopes up to 2%; scalded, hummocky surfaces | Mainly greyish to brownish sands and loams over tough clays | Mixed woodlands with *Triodia bitextura - Chrysopogon* spp. and *Triodia pungens* ground storeys. *Adansonia gregorii* and *Bauhinia cunninghamii* alliances |
| | **Channels:** up to 75 m wide and 4.5 m deep | Channels, bedloads range from sand to boulders. Banks, brownish stony alluvial soils | Fringing woodlands. *Eucalyptus camaldulensis - Terminalia platyphylla* fringing communities |

# 3.3 Land use

## 3.3.1 Conservation reserves and estates

While no specific conservation reserves or estates were identified within the study area, a single National Heritage place was located within the study area, that being the West Kimberley Heritage Area. In addition, Two Biologically Important Areas were identified within the study area, that being the foraging and nursing grounds for the EPBC-listed Freshwater Sawfish (*Pristis pristis).*

## 3.3.2 Environmentally Sensitive Areas

The nearest Environmentally Sensitive Area (ESA) is located approximately 4 km east of the Camballin survey area, which is associated with the Camballin Floodplain (Le Livre Swamp System), a Nationally Important Wetland, and a major post-breeding refuge for waterbirds.

# 3.4 Hydrology

The GoWA (2024) data layers identified the water resource aspects present in the survey area and surrounding study area. These are detailed in Table 15.

***Table 15 Hydrology aspects of the study area***

| Aspect | Details | Results |
|---|---|---|
| Groundwater Areas | Groundwater areas proclaimed under the *Rights in Water and Irrigation Act 1914* (RiWI Act) | Canning-Kimberley Groundwater Area intersects the survey area. |
| Surface Water Areas | Surface water areas proclaimed under the RiWI Act | Fitzroy River and Tributaries occurs in the survey area. |
| Irrigation District | Irrigation Districts proclaimed under the RiWI Act | Camballin Irrigation District occurs in the survey area. |
| Rivers | Rivers proclaimed under the RiWI Act | No RiWI act rivers in the study area. |
| Public Drinking Water Source Areas (PDWSA) | PDWSA is a collective term used for the description of Water Reserves, Catchment Areas and Underground Pollution Control Areas declared (gazetted) under the provisions of the *Country Area Water Supply Act 1947* | Camballin Water Reserve located approximately 4.5 km northeast of the survey area. |
| Waterways Management Areas | Areas proclaimed under *the Waterway Conservation Act 1976* | None in study area. |

## 3.4.1 Wetlands, rivers and watercourses

The Camballin Floodplain (Le Livre Swamp System), a Nationally Important Wetland is located in the study area, approximately 4 km east south-east of the survey area. Two Biologically Important Areas were identified within the study area, that being the foraging and nursing grounds for the EPBC-listed Freshwater Sawfish (*Pristis pristis*), associated with the Camballin Floodplain (Le Livre Swamp System), which is in the study area.

# 3.5 Vegetation and flora

## 3.5.1 Regional biogeography

The survey area is located within the Dampierland bioregion and the Fitzroy Trough subregion (DAL01), as described by the Interim Biogeographic Regionalisation of Australia (IBRA). The Dampierland and Fitzroy Trough regions contain Quarternary alluvial plains associated with the Permian and Mesozoic sediments of Fitzroy Trough, and support tree savannas of *Chrysopogon - Dichanthium* grasses with scattered *Eucalyptus microtheca* -

*Lysiphyllum cunninghamii* and riparian forests of River Gum and Cadjeput fringe drainages (Environment Australia, 2000).

### 3.5.2 Broad vegetation mapping and extent

Broad scale (1:1,000,000) pre-European vegetation mapping of the area was completed by Beard (1977) at an association level. The mapping indicates that one vegetation association is present within the survey area.

The survey area intersects the North Fitzroy Plains vegetation association (702) characterised as Grass-steppe, Hummock grassland Triodia spp.

The pre-European mapping has been adapted and digitised by Shepherd et al. (2002). The extent of vegetation associations have been determined by the state-wide vegetation remaining extent calculations maintained by DBCA (GoWA 2024). As shown in Table 16, the current extent remaining of vegetation association 702 is greater than 99% of the calculated pre-European extents at all scales (e.g. State, IBRA bioregion, IBRA subregion and Local Government Area (LGA)). No land containing vegetation association 702 is managed by the DBCA.

***Table 16 Extents of vegetation associations mapped within the survey area***

| Vegetation association | Scale | Pre-European extent (ha) | Current extent (ha) | Remaining (%) | % current extent in all DBCA managed land (proportion of current extent) |
|---|---|---|---|---|---|
| 702 | State: WA | 25,433.14 | 25,418.64 | 99.94 | - |
| | IBRA Bioregion: Dampierland | 25,433.14 | 25,418.64 | 99.94 | - |
| | IBRA Subregion: Fitzroy Trough (DAL01) | 25,433.06 | 25,418.56 | 99.94 | - |
| | LGA: Shire of Derby (West Kimberley) | 25,433.14 | 25,418.64 | 99.94 | - |

### 3.5.3 Significant ecological communities

The EPBC Act PMST did not identify any Threatened Ecological Communities (TECs) within the study area.

The DBCA TEC and PEC database (DBCA 2024) identified one PEC as occurring in the study area, approximately 6 km south of the survey area. This PEC is Kimberley Vegetation Association 759 (Priority 3) and is associated with a major drainage line system (Figure 2, Appendix A).

The PEC is described as Grasslands, tall bunch grass savanna woodland, coolabah over ribbon/blue grass (*Botriochloa* spp.).

### 3.5.4 Flora diversity

The *NatureMap* database identified 296 flora taxa previously recorded within the desktop study area (DBCA 2007). The *NatureMap* database search for flora is provided in Appendix C.

### 3.5.5 Significant flora

The EPBC Act PMST, *NatureMap* and DBCA TPFL databases identified the presence/potential presence of four significant flora taxa within a 20 km buffer of the survey area. Locations of significant flora in the vicinity of the survey area are presented in Figure 2, Appendix A.

The list of significant species relevant to the study area is provided in the likelihood of occurrence table presented in Appendix D. The pre-survey likelihood of occurrence assessment concluded that one species was unlikely to occur and three species potentially occur in the survey area:

– *Tephrosia pedleyi* (P3)
– *Goodenia byrnesii* (P3)
– *Corchorus fitzroyensis* (P3).

# 3.6 Fauna

## 3.6.1 Fauna diversity

The *NatureMap* database search identified 166 terrestrial vertebrate fauna species previously recorded within the desktop study area. This total includes 10 amphibia, 124 birds, 8 mammals, 7 fish species, and 17 reptiles.

## 3.6.2 Significant fauna

Based on the database searches (*NatureMap*, DBCA database and PMST), 51 significant terrestrial vertebrate taxa were identified within 20 km of the survey area.

These species included:

– 35 bird species (26 Migratory (MI), 1 Critically Endangered (CR), 4 Endangered (EN), 3 Vulnerable (VU), 1 Other Specially Protected Species (OS).
– 10 mammal species (3 Endangered (EN), 3 Vulnerable (VU), 1 Priority two (P2), 3 Priority 4 (P4).
– 7 reptile species (2 Critically Endangered (CR), 1 Endangered (EN), 1 Vulnerable (VU),1 Priority two (P2), 1 Other Specially Protected Species (OS), 1 Migratory (MI).
– 3 freshwater fish species (1 Priority one (P1), 1 Priority two (P2), and 1 Priority three (P3).
– 1 amphibian (1 Priority 3)

All significant species identified within the desktop study area are presented in the Likelihood of Occurrence (LOO) provided in Appendix E.

# 4 Desktop assessment – Derby

## 4.1 Location

The Derby survey area is located in the West Kimberley district of WA in the town of Derby. The sites consisted of Sites O, C, D, I, P and the connection route.

## 4.2 Physical environment

Ecological and land use constraints for the Derby survey area are presented in Figure 8, Appendix A.

### 4.2.1 Climate

The nearest reliable data for temperature and rainfall is at the Derby Aero (no. 3032) as is presented in Plate 3 and Table 17. The data shows that the total rainfall for 2024 is well below the long-term average in January and February, and slightly below the average for March. The data shows a slightly warmer 2024 (2-3ºC) than the long-term average for the minimum and maximum temperatures. March was cooler than average in 2024 by 2ºC.

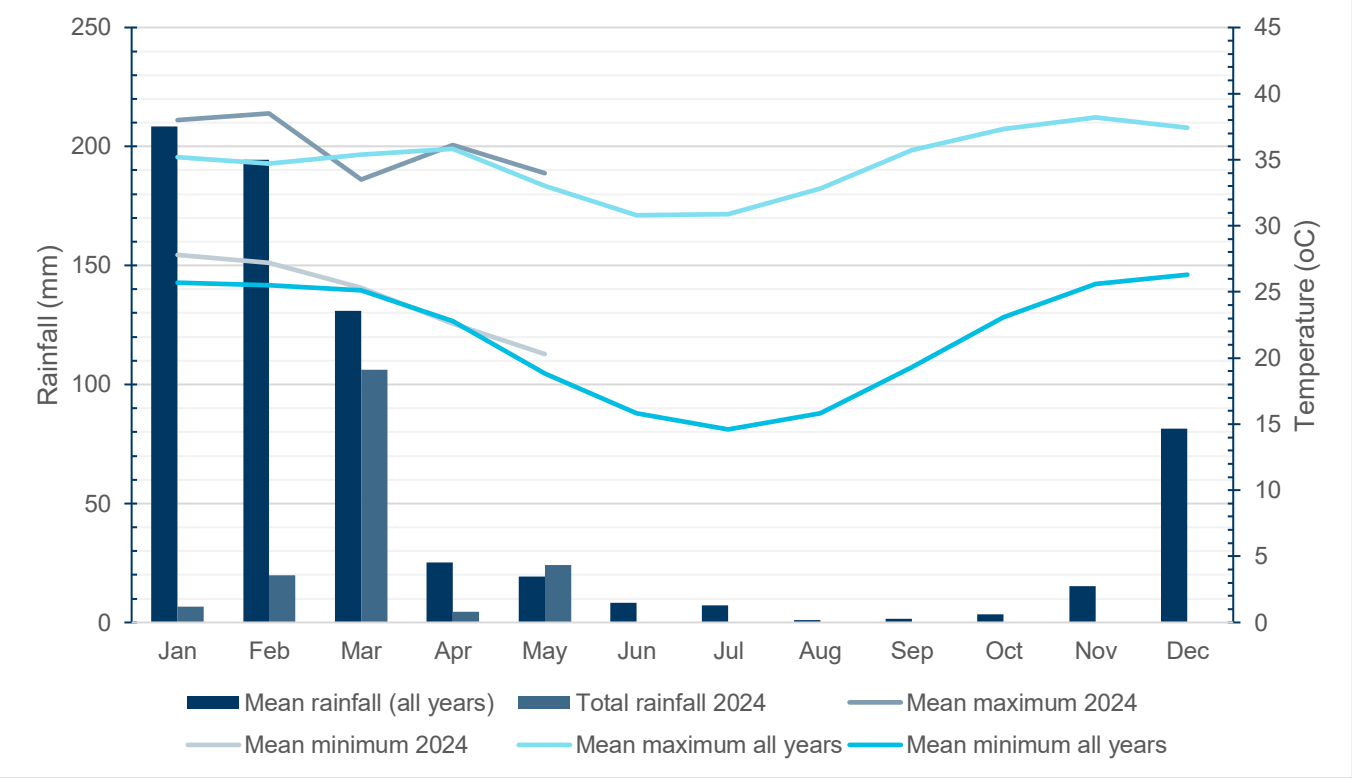



***Plate 3*** ***Climate data (BoM, 2024) – Derby***

*Table 17 Climate data summary for Derby*

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mean rainfall (all years) | 208.3 | 194.4 | 130.9 | 25.3 | 19.2 | 8.2 | 7.3 | 1.1 | 1.4 | 3.4 | 15.3 | 81.5 |
| Total rainfall 2024 | 6.6 | 19.8 | 106.2 | 4.4 | 24.2 | | | | | | | |
| Mean maximum 2024 | 38 | 38.5 | 33.5 | 36.1 | 34 | | | | | | | |
| Mean minimum 2024 | 27.8 | 27.2 | 25.3 | 22.6 | 20.3 | | | | | | | |
| Mean maximum all years | 35.2 | 34.7 | 35.4 | 35.8 | 33 | 30.8 | 30.9 | 32.8 | 35.7 | 37.3 | 38.2 | 37.4 |
| Mean minimum all years | 25.7 | 25.5 | 25.1 | 22.8 | 18.8 | 15.8 | 14.6 | 15.8 | 19.3 | 23.1 | 25.6 | 26.3 |

## 4.2.2 Geology, soils and land systems

The Kimberley region land systems have been mapped by the Department of Agriculture and Food Western Australia (Payne and Schoknecht, 2011). The Kimberley Region includes 111 land systems and covers 330,070 km2.

The Derby survey area is located within the Carpentaria and Wanganut land systems mapped as the following:

– Carpentaria: Coastal country, bare mud flats and saline soils with halophytic vegetation
– Wanganut: Sandplains and linear dunes supporting pindan woodlands with acacias and bloodwoods and curly spinifex- ribbon grass, and broad low-lying swales supporting bloodwood-grey box woodlands with curly spinifex-ribbon grass.

A summary of the land systems as per (Payne and Schoknecht, 2011) are provided in Table 18 below.

*Table 18 Descriptions of the soil sub-systems mapped within the Derby survey area*

| Sub-system name | Landform | Soil | Vegetation |
|---|---|---|---|
| Carpentaria Land System | Inner slopes: lightly firmed sandy surfaces | Yellowish sandy soils, commonly mottled and showing saline influence | Thickets of Melaleuca spp. with variable ground storeys. Melaleuca Alsophila alliance (35a, 35b). |
| | Drainage mouths | Variable soil complex mainly yellowish, sandy soils and loamy alluvial soils. Both exhibiting local saline influence. | Thickets of Melaleuca spp. with variable ground storeys. Melaleuca Alsophila alliance (35a, 35b). |
| | Samphire flats | Brownish and greyish, calcareous, saline loams | Halophytic shrubland. Samphire community |
| | Mud flats | Dark saline muds | Bare mud. |
| | Dunes | Sandy commonly calcareous beach dunes | *Spinifex longifolius* and other perennial tussock grasses and forbs with an open shrub layer (*Acacia* spp.) and scattered trees. |
| | Slopes at lower margin of mud flats | Dark saline muds | Low open mangrove community |
| | Outer flats | Dark saline muds | Dense mangrove communities |
| Wanganut Land System | Sandplain | Deep red sands | Woodlands (pindan) with prominent Acacia shrub layer and *Triodia bitextura - Chrysopogon* spp. *Corymbia dichromophloia* alliance. High-rainfall parts: *Eucalyptus miniata* alliance |

| Sub-system name | Landform | Soil | Vegetation |
|---|---|---|---|
| | Linear dunes | Mainly deep red sands and Pindan dunes with reddish sandy soils | Low woodland (pindan) with patches of dense Acacia shrubs and *Triodia bitextura - Chrysopogon* spp. and *Aristida* spp. ground storeys. *C. dichromophloia* and *Bauhinia cunninghamii* alliances. High-rainfall parts: *E. miniata* community. |
| | Dune Swales and low-lying sandplain | Mainly yellowish sandy soils. Minor amounts of reddish sandy soil | Grassy woodlands with patchy Acacia shrub layer, *Triodia bitextura* and *T. bitextura - Chrysopogon* spp. ground storeys. *C. dichromophloia, E. tectifica* and *E. microtheca* alliances [Introduced buffel grass (*Cenchrus ciliaris*) now common in parts]. |
| | Pans and depressions | Yellowish, strongly mottled loamy soils on depressions.<br>Brownish, massive, intractable heavy clays in pans. | Ribbon grass grasslands with patches of *Triodia bitextura* and fringing paperbark and bloodwood woodlands. *C. polycarpa, E. microtheca,* and *Melaleuca* spp. alliances. |
| | Drainage floors | Complex of yellowish sandy soils and scalded greyish and brownish sands and loams over tough clays | Complex of ribbon grass and paperbark trees. *Melaleuca* spp. community and *Chrysopogon* spp. community |
| | Channels | Channels, bed-loads of deep sand. Banks, brownish sandy and loamy alluvial soils | Fringing forests and woodlands. *E. camaldulensis - Terminalia platyphylla* fringing community. |

# 4.3 Land use

## 4.3.1 Conservation reserves and estates

While no specific conservation reserves or estates were identified within the survey area, a single national heritage place was located within the study area, that being The West Kimberley heritage area. In addition, fourteen (14) biologically important areas were identified within the surrounding 20km buffer zone, that being the foraging and nursing grounds for the EPBC-listed Freshwater Sawfish (*Pristis pristis) and* potential calving and breeding grounds for the Australian Snubfin Dolphin (*Orcaella heinsohni*), the Indo-Pacific Humpback Dolphin (*Sousa chinensis*), and Indo-Pacific Spotted Dolphin (*Tursiops aduncus*).

## 4.3.2 Environmentally sensitive areas

No ESA's were identified within the study area.

# 4.4 Hydrology

The GoWA (2024) data layers identified the water resource aspects present in the survey area and surrounding study area. These are detailed in Table 19.

***Table 19 Hydrology aspects of the Derby study area***

| Aspect | Details | Results |
|---|---|---|
| Groundwater Areas | Groundwater areas proclaimed under the *Rights in Water and Irrigation Act 1914* (RiWI Act) | All Derby sites occur within the Derby Groundwater Area. |
| Surface Water Areas | Surface water areas proclaimed under the RiWI Act | The Fitzroy River and Tributaries surface water area occurs 17 km south of the survey area. |
| Irrigation District | Irrigation Districts proclaimed under the RiWI Act | None present. |
| Rivers | Rivers proclaimed under the RiWI Act | None present. |

| Aspect | Details | Results |
|---|---|---|
| Public Drinking Water Source Areas (PDWSA) | PDWSA is a collective term used for the description of Water Reserves, Catchment Areas and Underground Pollution Control Areas declared (gazetted) under the provisions of the *Country Area Water Supply Act 1947* | The Derby Water Reserve occurs adjacent to Site C and connection. |
| Waterways Management Areas | Areas proclaimed under *the Waterway Conservation Act 1976* | None present. |

### 4.4.1 Wetlands, rivers and watercourses

No significant or nationally important wetlands, rivers or watercourses were identified, and no RAMSAR-listed wetland ecosystems or communities were found within the survey area.

## 4.5 Vegetation and flora

### 4.5.1 Regional biogeography

The Derby survey area is located within the Dampierland bioregion and the Fitzroy Trough subregion (DAL01), as described by the Interim Biogeographic Regionalisation of Australia (IBRA). The Dampierland and Fitzroy Trough regions contain Quarternary alluvial plains associated with the Permian and Mesozoic sediments of Fitzroy Trough, and support tree savannas of Chrysopogon - Dichanthium grasses with scattered *Eucalyptus microtheca - Lysiphyllum cunninghamii* and riparian forests of River Gum and Cadjeput fringe drainages (Environment Australia, 2000).

### 4.5.2 Broad vegetation mapping and extent

Broad scale (1:1,000,000) pre-European vegetation mapping of the area was completed by Beard (1977) at an association level. The mapping indicates that two vegetation associations are present within the Derby survey area:

– Fitzroy Sandplains_127: Tidal mudflat
– Fitzroy Sandplains_764: Pindan with low trees. Acacia thicket with scattered low trees over spinifex *Acacia eriopoda, Corymbia dichromophloia, Triodia pungens, T. bitextura.*

The pre-European mapping has been adapted and digitised by Shepherd et al. (2002). The extent of vegetation associations have been determined by the state-wide vegetation remaining extent calculations maintained by DBCA (GoWA 2024). As shown in Table 20, the current extent remaining of vegetation association 127 is greater than 94% of the calculated pre-European extents at state level, greater than 98% at IBRA bioregion and subregion level and greater than 95% at LGA level, with 12.3% of current statewide extent occurring within DBCA managed lands. The current extent remaining of 764 is 97.57% at all scales (e.g. State, IBRA bioregion, IBRA subregion and Local Government Area (LGA)). No land containing vegetation association 764 is managed by the DBCA.

***Table 20 Extents of vegetation associations mapped within the Derby survey areas***

| Vegetation association | Scale | Pre-European extent (ha) | Current extent (ha) | Remaining (%) | % current extent in all DBCA managed land (proportion of current extent) |
|---|---|---|---|---|---|
| 127 | State: WA | 737,724.05 | 697,871.38 | 94.60 | 12.30 |
| | IBRA Bioregion: | 165,317.62 | 162,996.35 | 98.60 | 2.94 |
| | IBRA Subregion: | 131,508.77 | 129,808.64 | 98.71 | 0.05 |
| | LGA: | 172,426.38 | 164,456.92 | 95.38 | 8.01 |
| 764 | State: WA | 53,248.07 | 51,954.64 | 97.57 | 0 |
| | IBRA Bioregion: | 53,248.07 | 51,954.64 | 97.57 | 0 |

| Vegetation association | Scale | Pre-European extent (ha) | Current extent (ha) | Remaining (%) | % current extent in all DBCA managed land (proportion of current extent) |
|---|---|---|---|---|---|
| | IBRA Subregion: | 53,248.07 | 51,954.64 | 97.57 | 0 |
| | LGA: | 53,248.07 | 51,954.64 | 97.57 | 0 |

### 4.5.3 Significant ecological communities

A review of the DBCA TEC and PEC database (DBCA 2024a) and the EPBC Act PMST (DCCEEW 2024) did not identify the presence of any listed communities previously recorded within the study area. The survey area does not intersect with any PEC or TEC occurrences (or their buffers).

### 4.5.4 Flora diversity

The *NatureMap* database identified 342 flora taxa previously recorded within the study area (DBCA 2007-). The *NatureMap* database search for flora is provided in Appendix C.

### 4.5.5 Significant flora

The EPBC Act PMST, *NatureMap* and DBCA TPFL databases identified the presence/potential presence of four significant flora taxa within a 20 km buffer of the survey area. Locations of significant flora in the vicinity of the survey area are presented in Figure 8, Appendix A.

The list of significant species relevant to the study area is provided in the likelihood of occurrence table presented in Appendix D. The pre-survey likelihood of occurrence assessment concluded that all species identified by the desktop assessment are unlikely to occur.

## 4.6 Fauna

### 4.6.1 Fauna diversity

The *NatureMap* database search identified 378 terrestrial vertebrate fauna species previously recorded within the region. This total includes 13 amphibians, 274 birds, 20 mammals, 22 fish species and 49 reptiles.

### 4.6.2 Significant fauna

Based on the database searches (*NatureMap*, DBCA database and PMST), 77 conservation significant terrestrial vertebrate taxa were identified within 20 km of the survey area.

These species included:

– 60 bird species (42 Migratory (MI), 2 Critically Endangered (CR), 8 Endangered (EN), 7 Vulnerable (VU), 1 Other Specially Protected Species (OS).
– 8 mammal species (1 Endangered (EN), 5 Vulnerable (VU), 1 Priority one (P1), 1 Priority two (P2).
– 4 reptile species (2 Critically Endangered (CR), 1 Endangered, 1 Migratory (MI).
– 4 freshwater fish species (3 Vulnerable (VU), 1 Priority one (P1).
– 1 amphibian (Priority 3).

All significant species identified within the desktop study area are presented in the Likelihood of Occurrence (LOO) assessment in Appendix D and further discussed below.

# 5 Desktop assessment – Broome

## 5.1 Location

The Broome survey area is located in the West Kimberley district in WA within the Shire of Broome. The sites consisted of Sites F, G and H, G-H Connection and F Connection (Figure 13).

## 5.2 Physical environment

Ecological and land use constraints for the Broome survey area are presented Figure 14, Appendix A.

### 5.2.1 Climate

The nearest reliable data for temperature and rainfall is at the Broome Airport (no. 3003) as is presented in Plate 4 and Table 21. The data shows that the total rainfall for 2024 is well below the long-term average for January and February, but higher in March, April and May. The temperature data shows a slightly warmer 2024 than the long-term average for the months of January-February and April-May (maximum temperature), but it is very slight (1ºC).

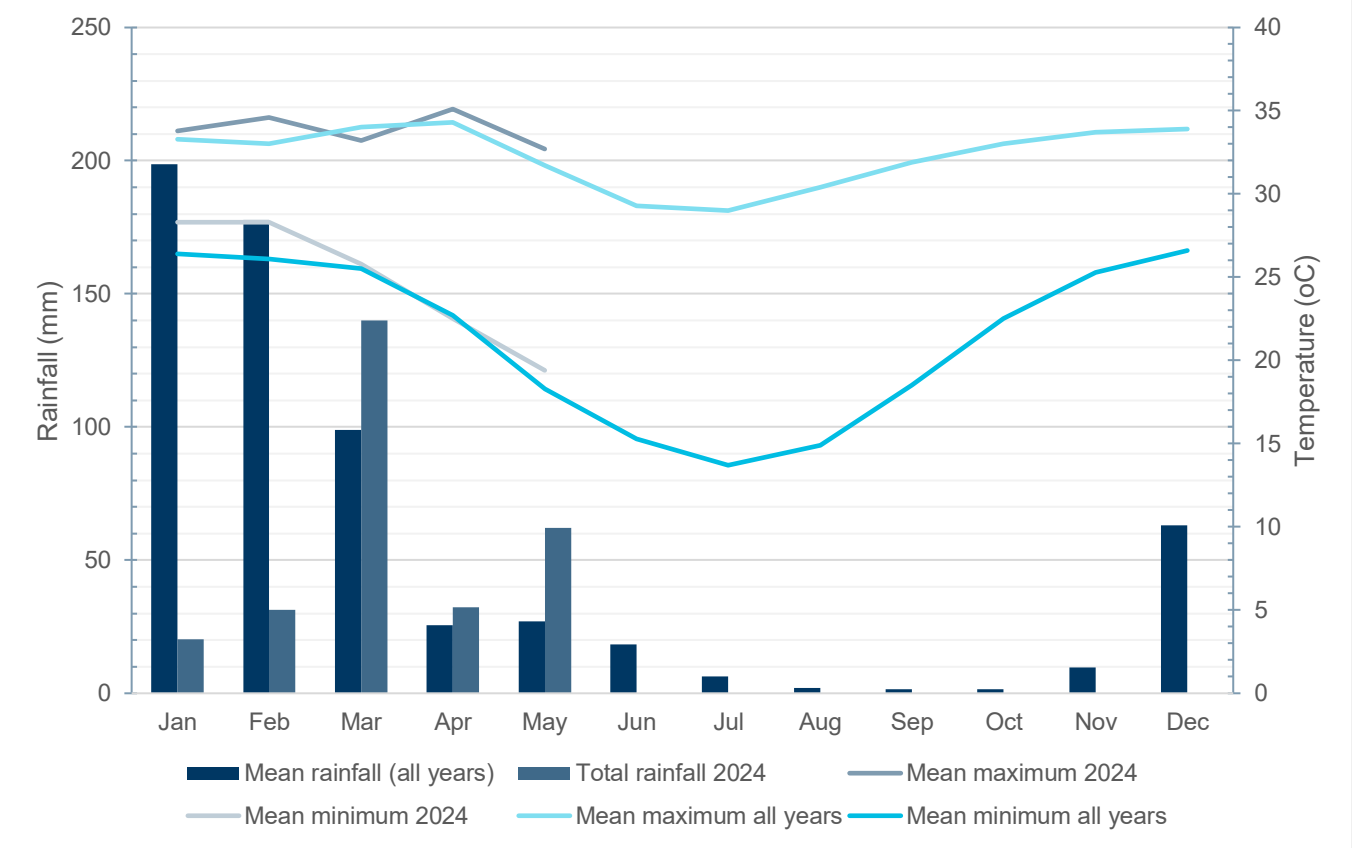



***Plate 4*** ***Climate data (BoM, 2024) – Broome***

*Table 21 Climate data summary for Broome*

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mean rainfall (all years) | 198.7 | 177.8 | 98.8 | 25.6 | 27 | 18.4 | 6.3 | 2.1 | 1.4 | 1.4 | 9.6 | 63 |
| Total rainfall 2024 | 20.2 | 31.4 | 140 | 32.4 | 62.2 | | | | | | | |
| Mean maximum 2024 | 33.8 | 34.6 | 33.2 | 35.1 | 32.7 | | | | | | | |
| Mean minimum 2024 | 28.3 | 28.3 | 25.8 | 22.5 | 19.4 | | | | | | | |
| Mean maximum all years | 33.3 | 33 | 34 | 34.3 | 31.7 | 29.3 | 29 | 30.4 | 31.9 | 33 | 33.7 | 33.9 |
| Mean minimum all years | 26.4 | 26.1 | 25.5 | 22.7 | 18.3 | 15.3 | 13.7 | 14.9 | 18.5 | 22.5 | 25.3 | 26.6 |

## 5.2.2 Geology, soils and land systems

The Kimberley region land systems have been mapped by the Department of Agriculture and Food Western Australia (Payne and Schoknecht, 2011). The Kimberley Region includes 111 land systems and covers 330,070 km2.

The Broome survey area is located within the Yeeda and Wanganut land systems, with a small section of the F connection corridor within Carpentaria Land System high capacity and Carpentaria Land System low capacity, described as the following:

– Carpentaria (low capacity): Coastal flats, associated sandy margins and dunes; saline sands and muds; paperbark thickets, samphire meadows, extensive bare mud flats with fringing mangrove forests.
– Carpentaria (high capacity): Sandy surfaced coastal plains supporting rice grass and saltwater couch.
– Wanganut: Sandplains and linear dunes supporting pindan woodlands with acacias and bloodwoods and curly spinifex- ribbon grass, and broad low-lying swales supporting bloodwood-grey box woodlands with curly spinifex-ribbon grass.
– Yeeda: Sandplains with red and yellow sands supporting pindan acacia shrublands with emergent eucalypt trees.

A summary of the land systems as per (Payne and Schoknecht, 2011) are provided in Table 22 below.

*Table 22 Descriptions of the soil sub-systems mapped within the Broome survey area*

| Sub-system name | Landform | Soil | Vegetation |
|---|---|---|---|
| Carpentaria Land System | Inner slopes: lightly firmed sandy surfaces | Yellowish sandy soils, commonly mottled and showing saline influence | Thickets of Melaleuca spp. with variable ground storeys. Melaleuca Alsophila alliance (35a, 35b). |
| | Drainage mouths | Variable soil complex mainly yellowish, sandy soils and loamy alluvial soils. Both exhibiting local saline influence. | Thickets of Melaleuca spp. with variable ground storeys. Melaleuca Alsophila alliance (35a, 35b). |
| | Samphire flats | Brownish and greyish, calcareous, saline loams | Halophytic shrubland. Samphire community |
| | Mud flats | Dark saline muds | Bare mud. |
| | Dunes | Sandy commonly calcareous beach dunes | *Spinifex longifolius* and other perennial tussock grasses and forbs with an open shrub layer (*Acacia* spp.) and scattered trees. |
| | Slopes at lower margin of mud flats | Dark saline muds | Low open mangrove community |
| | Outer flats | Dark saline muds | Dense mangrove communities |
| | Sandplain | Deep red sands | Woodlands (pindan) with prominent Acacia shrub layer and *Triodia bitextura* - *Chrysopogon* spp. |

| Sub-system name | Landform | Soil | Vegetation |
|---|---|---|---|
| Wanganut Land System | | | *Corymbia dichromophloia* alliance. High-rainfall parts: *Eucalyptus miniata* alliance |
| | Linear dunes | Mainly deep red sands and Pindan dunes with reddish sandy soils | Low woodland (pindan) with patches of dense Acacia shrubs and *Triodia bitextura - Chrysopogon* spp. and *Aristida* spp. ground storeys. *C. dichromophloia* and *Bauhinia cunninghamii* alliances. High-rainfall parts: *E. miniata* community. |
| | Dune Swales and low-lying sandplain | Mainly yellowish sandy soils. Minor amounts of reddish sandy soil | Grassy woodlands with patchy Acacia shrub layer, *Triodia bitextura* and *T. bitextura - Chrysopogon* spp. ground storeys. *C. dichromophloia, E. tectifica* and *E. microtheca* alliances [Introduced buffel grass (*Cenchrus ciliaris*) now common in parts]. |
| | Pans and depressions | Yellowish, strongly mottled loamy soils on depressions.<br>Brownish, massive, intractable heavy clays in pans. | Ribbon grass grasslands with patches of *Triodia bitextura* and fringing paperbark and bloodwood woodlands. *C. polycarpa, E. microtheca,* and *Melaleuca* spp. alliances. |
| | Drainage floors | Complex of yellowish sandy soils and scalded greyish and brownish sands and loams over tough clays | Complex of ribbon grass and paperbark trees. *Melaleuca* spp. community and *Chrysopogon* spp. community |
| | Channels | Channels, bed-loads of deep sand. Banks, brownish sandy and loamy alluvial soils | Fringing forests and woodlands. *E. camaldulensis - Terminalia platyphylla* fringing community. |
| Yeeda Land System | Sandplain | Deep red sands | Woodland (pindan) with prominent Acacia shrub layer and *Triodia bitextura, Chrysopogon* spp. ground storey. *Corymbia dichromophloia* alliance. Higher rainfall parts: *Eucalyptus miniata* alliance. |
| | Shallow valleys | Reddish sandy soils<br>Deep yellow sands in higher-rainfall areas. | Grassy woodlands with patchy Acacia shrub layer and *Chrysopogon* spp. *E. tectifica* and *E. argillacea*. Higher rainfall parts: *E. miniata* alliance. |
| | Plains with thin sand cover | Yellowish sandy soils.<br>Scalded areas of greyish sands over tough loamy subsoils. | Open patchy woodland with *Chrysopogon* spp. and *Triodia bitextura*, patches of paperbark trees. *Grevillea striata, Bauhinia cunninghamii* and *Melaleuca* spp. alliances. |
| | Pans | Brownish, massive, intractable, silty to heavy clays | Various tall grasses with fringes of bloodwood and paperbark woodlands. *C. polycarpa* and *Melaleuca* spp. alliance. |

# 5.3 Land use

## 5.3.1 Conservation reserves and estates

Twelve main conservation reserves and estates were identified within the study area, all of which were located on the periphery of the allocated buffer zone for the desktop study. These sites are presented in the Table 23 below.

***Table 23 Conservation Reserves and Estates for Broome Site Areas***

| Protected Area ID | Protected Area Name | Reserve Type | Jurisdiction | Environment Type | Buffer Status |
|---|---|---|---|---|---|
| WA_41066 | Broome Bird Observatory | 5(1)(h) Reserve | State | Terrestrial | In buffer area only |

| Protected Area ID | Protected Area Name | Reserve Type | Jurisdiction | Environment Type | Buffer Status |
|---|---|---|---|---|---|
| WA_47964 | Broome Wildlife Centre | 5(1)(h) Reserve | State | Terrestrial | In buffer area only |
| WA_51617 | Unnamed WA51617 | 5(1)(h) Reserve | State | Terrestrial | In buffer area only |
| WA_52354 | Unnamed WA52354 | 5(1)(h) Reserve | State | Terrestrial | In buffer area only |
| WA_51497 | Unnamed WA51497 | 5(1)(h) Reserve | State | Terrestrial | In buffer area only |
| WA_51105 | Unnamed WA51105 | 5(1)(h) Reserve | State | Terrestrial | In buffer area only |
| WA_51583 | Unnamed WA51583 | 5(1)(h) Reserve | State | Terrestrial | In buffer area only |
| CWTH_IPA75 | Yawuru | Indigenous Protected Area | State | Terrestrial | In buffer area only |
| WA_51162 | Unnamed WA51162 | 5(1)(h) Reserve | State | Terrestrial | In buffer area only |
| 416 | Yawuru | Indigenous Protected Area | State | Marine | In buffer area only |
| 413 | Yawuru Nagulagun / Roebuck Bay | Marine Park | State | Marine | In buffer area only |
| 385 | Unnamed WA51046 | 5(1)(h) Reserve | State | Marine | In buffer area only |

A single national heritage place was located within the surrounding 20 km buffer zone, that being The West Kimberley heritage area. In addition, twenty-six (26) biologically important areas were identified within the surrounding 20 km buffer zone, that being the foraging and nursing grounds for the EPBC-listed Freshwater Sawfish (*Pristis pristis) and* potential calving and breeding grounds for the Australian Snubfin Dolphin (*Orcaella heinsohni*), the Indo-Pacific Humpback Dolphin (*Sousa chinensis*), and Indo-Pacific Spotted Dolphin (*Tursiops aduncus*).

### 5.3.2 Environmentally sensitive areas

One ESA intersects the survey area. This ESA is the buffer zone of the TEC: Roebuck Bay Mudflats, listed under the BC Act as Vulnerable. This TEC is discussed further in section 5.5.3.

## 5.4 Hydrology

The GoWA (2023) data layers identified the water resource aspects present in the survey area and surrounding study area. These are detailed below in Table 24.

***Table 24 Hydrology aspects of the Broome study area***

| Aspect | Details | Results |
|---|---|---|
| Groundwater Areas | Groundwater areas proclaimed under the *Rights in Water and Irrigation Act 1914* (RiWI Act) | All Broome survey areas occur within the Broome Groundwater Area. |
| Surface Water Areas | Surface water areas proclaimed under the RiWI Act | None present |
| Irrigation District | Irrigation Districts proclaimed under the RiWI Act | None present |
| Rivers | Rivers proclaimed under the RiWI Act | None present |

| Aspect | Details | Results |
|---|---|---|
| Public Drinking Water Source Areas (PDWSA) | PDWSA is a collective term used for the description of Water Reserves, Catchment Areas and Underground Pollution Control Areas declared (gazetted) under the provisions of the *Country Area Water Supply Act 1947* | Part of Site F and G-H Connection occur within the Broome Water Reserve. |
| Waterways Management Areas | Areas proclaimed under *the Waterway Conservation Act 1976* | None present. |

### 5.4.1 Wetlands, rivers and watercourses

Three nationally important wetlands occur within the study area:

– Willie Creek Wetlands (approximately 6 km north of Site F)
– Roebuck Bay (adjacent to Corridor F)
– Roebuck Plains System (approximately 13 km south east of Site H)

Roebuck Bay is also associated with a RAMSAR (internally important) wetland which is located approximately 3.8 km south of Site H.

## 5.5 Vegetation and flora

### 5.5.1 Regional biogeography

The Broome survey area is located within Pindanland subregion (DL2) of the Dampierland bioregion, as described by the Interim Biogeographic Regionalisation of Australia (IBRA). The Pindanland subregion comprises sandplains of the Dampier Peninsula and western part of Dampier Land including the hinterland of the Eighty Mile Beach (Graham 2001a). It is a fine-textured sand-sheet with subdued dunes and include the paleodelta of the Fitzroy River (Graham 2001a). The vegetation is described primarily as Pindan (Graham 2001a).

### 5.5.2 Broad vegetation mapping and extent

Broad scale (1:1,000,000) pre-European vegetation mapping of the area was completed by Beard (1977) at an association level. The mapping indicates that one vegetation association is present within the survey area.

The survey area intersects the Dampierland vegetation association (750) characterised as Pindan woodland: Acacia thicket with eucalypt woodland over spinifex *Acacia tumida, Eucalyptus tectifica, Corymbia grandifolia*, *Triodia pungens, T. bitextura.*

The pre-European mapping has been adapted and digitised by Shepherd et al. (2002). The extent of vegetation associations have been determined by the state-wide vegetation remaining extent calculations maintained by DBCA (GoWA 2024). As shown in Table 25, the current extent remaining of vegetation association 750 is greater than 99% of the calculated pre-European extents at all scales (e.g. State, IBRA bioregion, IBRA subregion and Local Government Area (LGA)). A total of 2.78% of the current extent of 750 occurs within DBCA managed land.

***Table 25 Extents of vegetation associations mapped within the survey area***

| Vegetation association | Scale | Pre-European extent (ha) | Current extent (ha) | Remaining (%) | % current extent in all DBCA managed land (proportion of current extent) |
|---|---|---|---|---|---|
| 750 | State: WA | 1,231,155.50 | 1,225,687.52 | 99.56 | 2.78 |
| | IBRA Bioregion: | 1,229,182.16 | 1,225,280.52 | 99.68 | 2.78 |
| | IBRA Subregion: | 1,221,734.45 | 1,217,843.72 | 99.68 | 2.80 |

| Vegetation association | Scale | Pre-European extent (ha) | Current extent (ha) | Remaining (%) | % current extent in all DBCA managed land (proportion of current extent) |
|---|---|---|---|---|---|
| | LGA: | 1,115,559.36 | 1,110,131.18 | 99.51 | 3.07 |

### 5.5.3 Significant ecological communities

A review of the DBCA TEC and PEC database (DBCA 2024a) and the EPBC Act PMST (DCCEEW 2024) identified the presence of nine listed communities previously recorded within the study area (Table 26). The survey area intersects with the following PEC or TEC occurrences (or their buffers):

– Minyjuru (*Sersalisia sericea)* Dune System Community (P1)
– Roebuck Bay Mudflats (Vulnerable)
– Kimberley Vegetation Association No. 73 (P3)
– Monsoon Vine Thickets of Dampier Peninsula (Endangered)

The locations of the TECs and PECs in the vicinity of the survey area are mapped in Figure 14, Appendix A.

*Table 26 Identified significant ecological communities – Broome Sites*

| Community name | EPBC Act | BC Act/ DBCA | Description (derived from DBCA (2023) unless specified) | Buffer Zone | Proximity to survey area or hectares (ha) occurring within the survey area |
|---|---|---|---|---|---|
| *Corymbia paractia* Dune Community | - | Priority 1 | *Corymbia paractia* dominated vegetation community behind dunes, particularly through the Broome township area and the Dampier Peninsula. The transition zone where coastal dunes (with vine thickets) merge with Pindan (desert) vegetation. Also found through ports north of Broome. Threats identified include clearing, trampling, weed invasion and altered fire regimes. | 500 | Nearest community recorded at 7km outside survey sites |
| Dwarf Pindan Heath Community | - | Priority 1 | Unique community recorded on pindan, with thin sand overlay with no dunal protection from winds, and dominated by *Acacia tumida* var. *kulparn* and *Grevillea pyramidalis* with scattered *Corymbia paractia* and *Gyrostemon tepperi, Dodonaea hispidula, Solanum cunninghamii, Persoonia falcata, Dolichandrone heterophylla, Gardenia pyriformis* and *Terminalia ferdinandiana* over *Triodia schinzii* with other species such as *T. pungens, Eragrostis eriopoda and Eriachne sp*. This community occurs between the racecourse and Gantheame Point lighthouse. Insufficient survey outside of Broome townsite area to determine full extent. Threats identified include clearing, trampling, weed invasion, altered fire regimes. | 750 | Nearest community recorded at 13km outside survey sites |
| Minyjuru (*Sersalisia serica*) Dune System Community | - | Priority 1 | A unique dune community that contains frequent, mature (100 years +) *Sersalisia sericea* or otherwise known as Minyjuru. Minyjurur is a culturally important and renowned local bushtucker species and does not occur in such frequency and longevity in other locations. The community is recorded as a *Eucalyptus, Sersalisia* low woodland unit that occurs on parallel dunes in the area south east of Gantheaume Point. The community also contains numerous woodland species such as*: Erythrophleum chlorostachys* (ironwood), Eucalyptus (*Corymbia) zygophylla* (Broome bloodwood), *Hakea macrocarpa* and *Corynotheca micrantha* (zig-zag Lilly). Some species are more reminiscent of desert and aridlands country including: *Solanum cunninghamii* (bush tomato), *Scaevola parvifolia*, *Goodenia sepalosa*, *Senna costata, Gyrostemon tepperi and Triodia sp*. (spinifex). The extensive stands of Minyjuru occur in association with species more often found within the nearby threatened ecological community- Monsoon vine thicket. Threats identified to this community include weed invasion, grazing, altered fire regime, and proposed developments. | 500 | Community or buffer intersects with the survey area (Site F, F connection and G-H connection) |

| Community name | EPBC Act | BC Act/ DBCA | Description (derived from DBCA (2023) unless specified) | Buffer Zone | Proximity to survey area or hectares (ha) occurring within the survey area |
|---|---|---|---|---|---|
| Nimalarica Claypan Community | - | Priority 4 | The Nimalarragun claypan and associated wetlands comprise a permanent, spring–fed freshwater system north of Broome in the West Kimberley. The wetlands occur on the eastern edge of the tidal-dominated Willie Creek system. Threats identified include groundwater extraction, feral herbivores (cattle, horses, donkeys), weed invasion, increased fire frequency. | 500 | Nearest community recorded at 8km outside survey sites |
| Roebuck Bay Mudflats | - | Vulnerable | Species-rich faunal community of the intertidal mudflats of Roebuck Bay. The community occurs on the intertidal mudflats of Roebuck Bay.<br>Roebuck Bay is a sheltered marine embayment on the macrotidal Kimberley coast containing large intertidal flats composed predominantly of carbonate sediments, which receives freshwater inputs to the bay mainly during the wet season.<br>The community comprises a diverse and abundant marine fauna, with an estimated 300–500 species of macrobenthic fauna as well as a high diversity and abundance of migratory shorebirds.<br>The threatened species *Caretta caretta* (loggerhead turtle), *Chelonia mydas* (green turtle), *Natator depressus* (flatback turtle) and the dwarf sawfish *Pristis clavata* (priority 1), as well as large proportions of the Australian populations of the birds *Limosa lapponica* (bar-tailed godwit; migratory species) and the threatened *Calidris (Calidris) tenuirostris* (great knot), utilise the habitat and comprise part of the assemblage. | 5,000 | Community or buffer intersects all survey areas. |
| Roebuck Land System | - | Priority 3 | This system represents an array of paleo-tidal coastal plains and tidal flats with saline soil supporting salt-water couch grasslands, samphire low shrublands, melaleuca thickets and mangroves. Threats to this community include extensive threatening processes acting at landscape scales, namely frequent fires leading to loss of trees and shrubs, over-grazing, and weed invasion (buffel grass). | 500 | Nearest community recorded at 5km outside survey sites |
| Kimberley Vegetation Association No. 73 | - | Priority 3 | This community consists of grasslands, short bunch grass savanna, and salt water grasslands, particularly *Sporobolus virginicus*. Threats identified include extensive threatening processes acting at landscape scales, namely altered fire regimes, over-grazing, and weed invasion. | 500 | Community or buffer intersects with the survey area (F Connection) |
| Kimberley Vegetation Association No. 770 | - | Priority 1 | This system consists of shrublands; particularly Wattle thickets near Broome. Threats identified include extensive threatening processes acting at landscape scales, namely altered fire regimes, over-grazing, and weed invasion. | 500 | Nearest community recorded at 5km outside survey sites |

| Community name | EPBC Act | BC Act/ DBCA | Description (derived from DBCA (2023) unless specified) | Buffer Zone | Proximity to survey area or hectares (ha) occurring within the survey area |
|---|---|---|---|---|---|
| Monsoon Vine Thickets of Dampier Peninsula | - | Endangered | This community is a type of rainforest ecosystem that occurs in discrete patches along the Dampier Peninsula, from Broome to Derby in the south-western portion of the Kimberley region. Vine thickets occur as discrete areas of dense vegetation and can occur as a stand of a few trees or as larger patches.<br>Common tree and tall shrub species include *Terminalia petiolaris* (Marool or blackberry tree), *Grewia breviflora* (currant or coffee fruit), *Celtis strychnoides* (goonj), *Diospyros humilis* (ebony wood), *Sersalisia sericea* (nangi), *Exocarpos latifolius* (broad-leaved cherry), *Mimusops elengi* (walara), *Lysiphyllum cunninghamii* (bauhinia or jigal tree), *Gyrocarpus americanus* subsp. *pachyphyllus* (helicopter tree), *Flueggea virosa* subsp. *melanthesoides* (dogwood), *Croton habrophyllus* and *Dodonaea platyptera* (broad-winged hop bush). The most common climbers are *Abrus precatorius* (crabs eyes), *Capparis lasiantha* (bush caper), *Tinospora smilacina* (snake vine), *Jasminum didymum, Caesalpinia major* and *Vincetoxicum cinerascens* (oyster-catcher bill). | 100 | Community or buffer intersects with the survey area (F Connection) |

### 5.5.4 Flora diversity

The *NatureMap* database identified 342 flora taxa previously recorded within the study area (DBCA 2007-). The *NatureMap* database search for flora is provided in Appendix C.

### 5.5.5 Significant flora

The EPBC Act PMST, *NatureMap* and DBCA TPFL databases identified the presence/potential presence of 11 significant flora taxa within a 20 km buffer of the survey area. Locations of significant flora in the vicinity of the survey area are presented in Figure 14, Appendix A.

The list of significant species relevant to the study area is provided in the likelihood of occurrence table presented in Appendix D. The pre-survey likelihood of occurrence assessment concluded that three species are unlikely to occur, two may potentially occur based on assessment of proximity of records to survey area and suitability of habitat. The following species are considered likely to occur:

– *Terminalia kumpaja* (P3)
– *Jacquemontia* sp. Broome (A.A. Mitchell 3028) (P1)
– *Polymeria* sp. Broome (K.F. Kenneally 9759) (P3)
– *Acacia monticola x tumida* var. *kulparn* (P3)
– *Glycine pindanica* (P3)
– *Corymbia paractia* (P1).

## 5.6 Fauna

### 5.6.1 Fauna diversity

The *NatureMap* database search identified 528 terrestrial vertebrate fauna species previously recorded within the region. This total includes 11 amphibians, 357 birds, 45 mammals, 202 fish species, 25 invertebrates and 90 reptiles.

### 5.6.2 Significant fauna

Based on the database searches (*NatureMap*, DBCA database and PMST), 102 significant terrestrial vertebrate taxa were identified as likely to occur or known to be present within the desktop study area.

These species included:

– 82 bird species (54 Migratory (MI), 11 Endangered (EN), 11 Vulnerable (VU), 2 Critically Endangered (CR), 2 Priority 4 (P4), 1 Priority 3 (P3), 1 Other Specially Protected Species (OS),
– 4 freshwater fish species (1 Priority one (P1), and 3 Vulnerable (VU).
– 9 mammal species (1 Endangered (EN), 5 Vulnerable (VU), and 1 Priority two (P2).
– 7 reptile species (2 Critically Endangered (CR), 1 Endangered (EN), and 1 Migratory (MI).

All significant species identified as potentially occurring are presented in the Likelihood of Occurrence (LOO) assessment in Appendix D and further discussed below.

# 6 Desktop assessment – Halls Creek

## 6.1 Location

The Halls Creek survey area is located in the East Kimberley District of WA within the Shire of Halls Creek. The sites consisted of Sites C, Subsite C3 and connection (Figure 19).

## 6.2 Physical environment

### 6.2.1 Climate

The nearest reliable rainfall data for Halls Creek is at Sophie Downs (2049) station, whilst the nearest reliable temperature readings are from Warmun (2032) (Plate 5 and Table 27). There was no mean minimum temperature reading in January, April or May 2024. Rainfall was recorded significantly higher than the long-term average at Halls Creek during January – March 2024. Mean maximum temperature was 3ºC higher in January than the long-term average, but lower by 2ºC in March and April. Halls Creek/Warmun appear to experience cooler temperatures in the nights than typical tropical climates, with the lowest mean minimum temperature recorded at 12.8ºC in July.

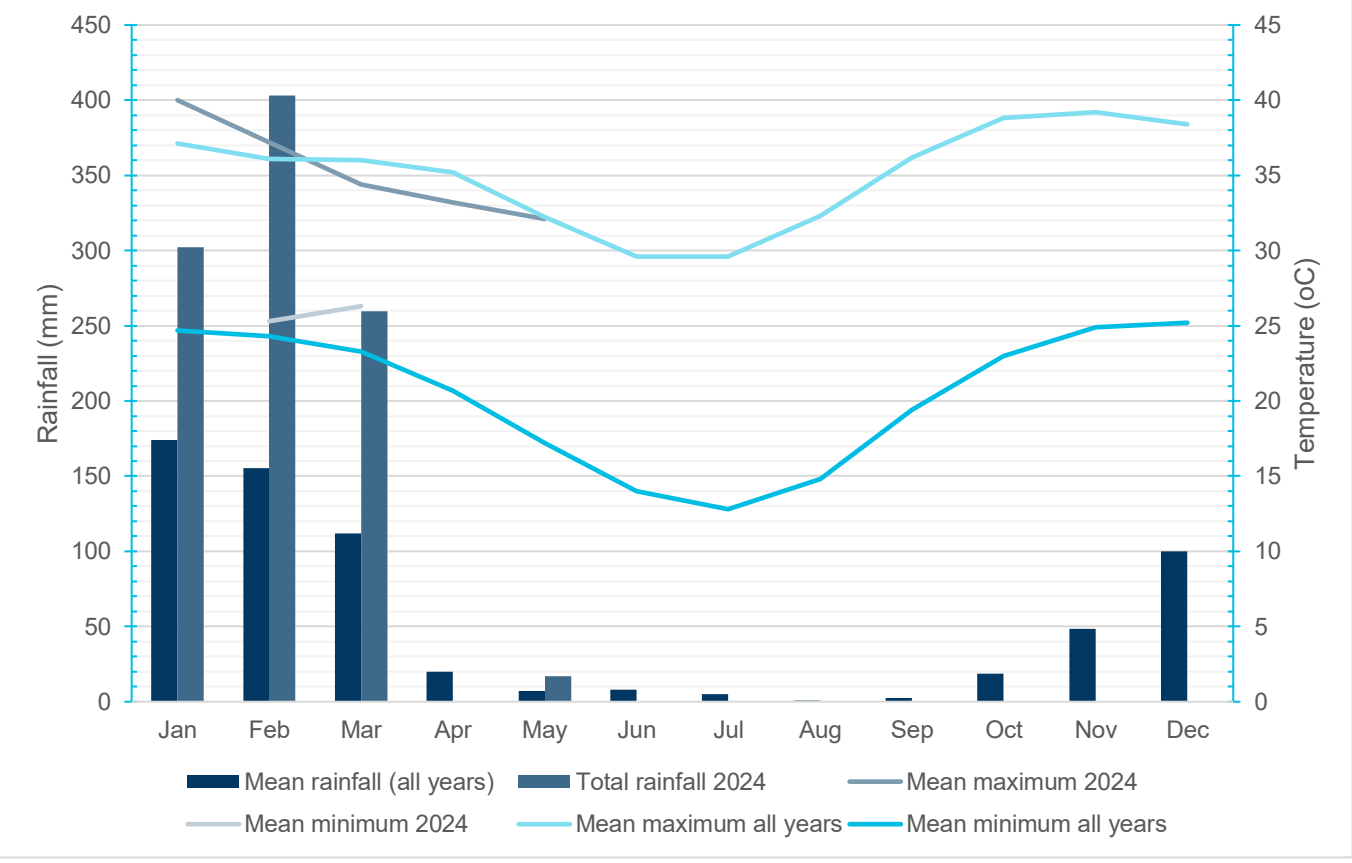



***Plate 5*** ***Climate data (BoM, 2024) – Halls Creek***

*Table 27 Climate data summary – Halls Creek*

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mean rainfall (all years) | 173.9 | 155.3 | 112.1 | 19.9 | 7.1 | 8.1 | 5.1 | 0.6 | 2.5 | 18.5 | 48.5 | 100.1 |
| Total rainfall 2024 | 302 | 403 | 259.5 | 0 | 17 | | | | | | | |
| Mean maximum 2024 | 40 | 37.2 | 34.4 | 33.2 | 32.1 | | | | | | | |
| Mean minimum 2024 | | 25.3 | 26.3 | | | | | | | | | |
| Mean maximum all years | 37.1 | 36.1 | 36 | 35.2 | 32.2 | 29.6 | 29.6 | 32.3 | 36.2 | 38.8 | 39.2 | 38.4 |
| Mean minimum all years | 24.7 | 24.3 | 23.3 | 20.7 | 17.2 | 14 | 12.8 | 14.8 | 19.4 | 23 | 24.9 | 25.2 |

## 6.2.2 Geology, soils and land systems

The Kimberley region land systems have been mapped by the Department of Agriculture and Food Western Australia (Payne and Schoknecht, 2011). The Kimberley Region includes 111 land systems and covers 330,070 km2.

The Halls Creek survey area is located within the Dockrell, Koongie and O'Donnell land systems, described as the following:

– Dockrell: Rocky, mountain ridges on metamorphic rocks, skeletal soils, open stunted woodlands with spinifex.
– O'Donnell: Stony undulating country with scattered hills, loamy skeletal soils, also restricted cracking clay plains, supporting open snappy gum woodlands with spinifex, arid short grasses and tussock grasses.
– Koongie: Low laterite plateaux and scattered hills, reddish loamy gravelly soils, low open snappy gum woodlands with spinifex or short grasses.

A summary of the land systems as per (Payne and Schoknecht, 2011) are provided in Table 28 below.

*Table 28 Descriptions of the soil sub-systems mapped within the Halls Creek survey area*

| Sub-system name | Landform | Soil | Vegetation |
|---|---|---|---|
| Dockrell | Stable Remnants | Reddish sandy soils with laterite horizon. | Woodland with patches of dense Acacia shrubs and *Triodia bitextura*. *Eucalyptus brevifolia* community. |
| | Ridges | Much outcrop with shallow, micaceous sandy skeletal soils. | Open woodland of small, stunted trees, moderately dense to sparse shrub layer and *Triodia intermedia* and *T. inutilis, E. brevifolia* alliance |
| | Valley Plains | Shallow brownish sands and loams over red clay commonly high in rock fragments. | As for unit 2. |
| | Alluvial Drainage Floors | Locally developed, commonly scalded areas of greyish to brownish sands and loams over tough clays. | Open spinifex grassland with scattered low trees and shrubs. *Triodia intermedia.* |
| | Channels | Channels bed loads range from sand to boulders. Banks, probably brownish sandy and loamy alluvial soils. | Small streams fringed by low trees and spinifex of adjacent community. *E. brevifolia* commonly. Larger streams with fringing woodlands. *E. camaldulensis - Terminalia platyphylla* fringing community |
| O'Donnell | Hills and ridges | Outcrop with limited areas of reddish, shallow, gravelly skeletal soil | Open snappy gum woodland with *Triodia bitextura. Eucalyptus brevifolia* community |
| | Hill-footslopes | Outcrop, with reddish skeletal soil. some shallow red sands | Mixed grasslands with scattered trees and shrubs. Local bare patches. *Chrysopogon fallax,* |

| Sub-system name | Landform | Soil | Vegetation |
|---|---|---|---|
| | | | *Dichanthium fecundum* and *Triodia intermedia* ground storey |
| | Interfluves | Outcrop, with reddish sandy and loamy skeletal soils with shallow brownish sands and loams over red clay | Very open grassy woodland with *Chrysopogon fallax* and other perennial and short grass ground storey. *E. brevifolia* community |
| | Cracking clay plains | Dark brown self-mulching clays | Mitchell grass and ribbon grass-bluegrass grasslands with sparse trees and shrubs. *Astrebla* spp. and *Chrysopogon* spp., *Dichanthium fecundum* and *Chrysopogon* spp. communities |
| | Alluvial drainage floors | Complex of greyish to brownish sands and loams over tough domed clays. Mottled yellowish sandy to loamy soils. Clayey alluvial soils | Mixed grasslands |
| | Channels | Channels, bed-loads range from deep sand to cobbles. Banks, brownish loamy alluvial soils. | Open woodland fringing community with patches of frontage grasses. *E. camaldulensis* community |
| Koongie | Summit remnants | Reddish, sandy to loamy soils with minor outcrop. | Woodlands with patches of dense *Acacia* shrubs and *Triodia bitextura. Eucalyptus brevifolia* community. |
| | Stripped surfaces | Mainly exposed laterite surface with pockets of reddish sandy soils. | Very open woodland of small trees and *Triodia intermedia. E. brevifolia* community. |
| | Slopes below breakaways | Shallow reddish, loamy and sandy soils community high in laterite gravel. Local, minor areas of brownish sands over red clay. | Much bare ground or with sparse cover of annual grasses; local patches of *Triodia intermedia* and low open woodland *E. brevifolia* alliance. |
| | Rocky hillslopes | Mainly outcrop with some areas of reddish, sandy skeletal soil. | Much bare rock. Pockets of *Triodia intermedia, T. inutilis,* and *Enneapogon* spp. and low open woodlands. *E. brevifolia* alliance. |
| | Hill-footslopes | Shallow reddish sandy and loamy soils. Some reddish sands and loams over red clay: | Spinifex grasslands and very open woodlands with *Triodia intermedia* and *Chrysopogon* spp. *E. brevifolia* alliance. |
| | Cracking clay plains | Dark brown self-mulching clays. | Mitchell grass and ribbon grass-bluegrass grasslands with scattered trees and shrubs. *Astrebla* spp. and *Chrysopogon* spp., *Dichanthium fecundum* communities. |
| | Alluvial drainage floors | Brownish sands and loams over red clay. | Open woodlands with *Chrysopogon* spp., locally short annual grasses. *E. brevifolia* community. |
| | Channels | Channels, bed-loads mainly deep sands with pebble gravels. Banks, brownish loamy alluvial soils. | Small streams with open fringing communities. Large streams, fringing forests and woodlands. *E. camaldulensis, Terminalia platyphylla* fringing communities. |

# 6.3 Land use

## 6.3.1 Conservation reserves and estates

No conservation reserves or estates were identified within the survey area, and no national heritage places were located within the surrounding 20 km buffer zone.

## 6.3.2 Environmentally sensitive areas

No ESAs are recorded within the study area.

# 6.4 Hydrology

The GoWA (2024) data layers identified the water resource aspects present in the survey area and surrounding study area. These are detailed below in Table 29.

*Table 29 Hydrology aspects of the Halls Creek study area*

| Aspect | Details | Results |
|---|---|---|
| Groundwater Areas | Groundwater areas proclaimed under the *Rights in Water and Irrigation Act 1914* (RiWI Act) | The survey area occurs within the Canning-Kimberley Groundwater Area. |
| Surface Water Areas | Surface water areas proclaimed under the RiWI Act | The study area is within the Fitzroy River and Tributaries surface water area. |
| Irrigation District | Irrigation Districts proclaimed under the RiWI Act | The survey area occurs within the Ord Irrigation District. |
| Rivers | Rivers proclaimed under the RiWI Act | None present. |
| Public Drinking Water Source Areas (PDWSA) | PDWSA is a collective term used for the description of Water Reserves, Catchment Areas and Underground Pollution Control Areas declared (gazetted) under the provisions of the *Country Area Water Supply Act 1947* | The Halls Creek Water Reserve is located approximately 350 m to the east of the survey area. |
| Waterways Management Areas | Areas proclaimed under *the Waterway Conservation Act 1976* | None present |

## 6.4.1 Wetlands, rivers and watercourses

No significant or nationally important wetlands, rivers or watercourses were identified, and no RAMSAR-listed wetland ecosystems or communities were found within the survey area.

# 6.5 Vegetation and flora

## 6.5.1 Regional biogeography

The Halls Creek survey area is located within the Hart Subregion (CK2) of the Central Kimberley bioregion, as described by the Interim Biogeographic Regionalisation of Australia (IBRA). The Central Kimberley is hilly to mountainous country with parallel siliceous ranges of Proterozoic sedimentary rocks with skeletal sandy soils and volcanics in valleys (Environment Australia 2000). The Hart subregion has a rugged topography dominated by Hart dolerite exposed along the eastern edge of the Kimberley Craton (Graham 2001b). This is the driest part of the Central Kimberley bioregion (Graham 2001b). The vegetation is primarily savannah woodland over Triodia spp. and/or bunch grasses (Graham 2001b).

## 6.5.2 Broad vegetation mapping and extent

Broad scale (1:1,000,000) pre-European vegetation mapping of the area was completed by Beard (1977) at an association level. The mapping indicates that three vegetation associations are present within the survey area:

– Bow River Hills_871: Curly spinifex or short grass low tree savanna / Grass-steppe
– Bow River Hills_837: Grasslands, short bunch-grass low-tree savanna. Short grasses with scattered trees e.g. *Bauhinia* and snappy gum *Enneapogon* spp., *Aristida* spp. with *Lysiphyllum cunninghamii, Eucalyptus brevifolia*
– Bow River Hills_834: Grasslands, tall bunch-grass savanna. Mainly Mitchell grass *Astrebla* spp.

The pre-European mapping has been adapted and digitised by Shepherd et al. (2002). The extent of vegetation associations have been determined by the state-wide vegetation remaining extent calculations maintained by DBCA (GoWA 2019). As shown in (Table 30), the current extent remaining of vegetation associations 871, 837 and 834 are greater than 99% of the calculated pre-European extents at all scales (e.g. State, IBRA bioregion, IBRA subregion and Local Government Area (LGA)). Vegetation association 834 included 16.7% of current statewide extent occurring on DBCA managed land. No land containing vegetation association 871 or 837 is managed by the DBCA.

***Table 30 Extents of vegetation associations mapped within the Halls Creek survey area***

| Vegetation association | Scale | Pre-European extent (ha) | Current extent (ha) | Remaining (%) | % current extent in all DBCA managed land (proportion of current extent) |
|---|---|---|---|---|---|
| 871 | State: WA | 230,547.71 | 230,264.07 | 99.88 | 0 |
| | IBRA Bioregion: | 230,415.48 | 230,131.84 | 99.88 | 0 |
| | IBRA Subregion: | 230,415.48 | 230,131.84 | 99.88 | 0 |
| | LGA: | 230,547.71 | 230,264.07 | 99.88 | 0 |
| 837 | State: WA | 172,815.95 | 172,553.02 | 99.85 | 0 |
| | IBRA Bioregion: | 151,537.39 | 151,274.46 | 99.83 | 0 |
| | IBRA Subregion: | 148,106.42 | 147,843.49 | 99.82 | 0 |
| | LGA: | 151,971.74 | 151,708.81 | 99.83 | 0 |
| 834 | State: WA | 32,597.17 | 32,588.83 | 99.97 | 16.70 |
| | IBRA Bioregion: | 24,391.01 | 24,382.67 | 99.97 | 0 |
| | IBRA Subregion: | 24,391.01 | 24,382.67 | 99.97 | 0 |
| | LGA: | 27,748.71 | 27,740.37 | 99.97 | 19.62 |

### 6.5.3 Significant ecological communities

A review of the DBCA TEC and PEC database (DBCA 2024 a) and the EPBC Act PMST (DCCEEW 2024) identified the presence of one listed community previously recorded within the study area (Table 31). The survey area intersects with the following PEC occurrence (or buffer): Kimberley Vegetation Association 834.

The locations of the PEC in the vicinity of the survey area is mapped in Figure 20, Appendix A.

***Table 31 Identified significant ecological communities – Halls Creek Sites***

| Community name | EPBC Act | BC Act/ DBCA | Description (derived from DBCA (2023) unless specified) | Buffer Zone | Proximity to survey area or hectares (ha) occurring within the survey area |
|---|---|---|---|---|---|
| Kimberley Vegetation Association No. 834 | - | Priority 3 | This community consists of grasslands, tall bunch grass savanna, Mitchell and blue grass species. Threats identified include extensive threatening processes acting at landscape scales, namely altered fire regimes, over-grazing, and weed invasion. | 500 | Nearest community recorded within and directly surrounding survey sites |

### 6.5.4 Flora diversity

The *NatureMap* database identified 209 flora taxa previously recorded within the study area (DBCA 2007-). The *NatureMap* database search for flora is provided in Appendix C.

### 6.5.5 Significant flora

The EPBC Act PMST, *NatureMap* and DBCA TPFL databases identified the presence/potential presence of six significant flora taxa within a 20 km buffer of the survey area. Locations of significant flora in the vicinity of the survey area are presented in Figure 20, Appendix A.

The list of significant species relevant to the study area is provided in the likelihood of occurrence table presented in Appendix D. The pre-survey likelihood of occurrence assessment concluded that three species are unlikely to occur, two may potentially occur based on assessment of proximity of records to survey area and suitability of habitat. The following species is considered likely to occur:

– *Goodenia crenata* (P3).

## 6.6 Fauna

### 6.6.1 Fauna diversity

The *NatureMap* database search identified 191 terrestrial vertebrate fauna species previously recorded within the region. This total includes 1 amphibian, 160 birds, 2 mammals, 2 fish species and 26 reptiles. In addition, a further 5 terrestrial invertebrate species were recorded within the site buffer zone.

### 6.6.2 Significant fauna

Based on the database searches (*NatureMap*, DBCA database and PMST), 41 significant terrestrial vertebrate taxa were identified within the 20 km desktop study area.

These species included:

– 27 bird species (16 Migratory (MI), five Endangered (EN), four Vulnerable (VU), one Critically Endangered (CR), and one Other Specially Protected Species (OS).
– 2 freshwater fish species (one Priority One (P1) and one Vulnerable (VU).
– 6 mammal species (Three Vulnerable (VU), two Priority Four (P4), and one Priority two (P2).
– 6 reptile species (two Critically Endangered (CR), one Endangered (EN), one Vulnerable (VU), one Priority One (P1), and one Other Specially Protected Species (OS).

All significant species identified as potentially occurring are presented in the Likelihood of Occurrence (LOO) assessment in Appendix D and further discussed below.

# 7 Field survey results

## 7.1 Flora and vegetation

### 7.1.1 Vegetation types

Twelve vegetation types aligning with broad landforms were identified and described in the survey areas, not including cleared areas for tracks, or weed dominated patches:

**Camballin/Looma**

– VT01 – Open woodland of *Corymbia zygophylla* over open shrubland of *Acacia tumida, Grevillea refracta* and *Grevillea wickhamii* subsp. *aprica* on red-orange sandplain

**Derby**

– VT02 – Open woodland of *Corymbia dichromophloia, Adansonia gregorii* and *Lysiphyllum cunninghamii* over open shrubland (where more recently burnt) or tree form of *Acacia tumida* var. *kulparn* on light brown sandplain
– VT03 – Open woodland of *Adansonia gregorii, Corymbia zygophylla* and *Corymbia opaca* over open woodland of *Lysiphyllum cunninghamii, Hakea arborescens* and *Melaleuca cajuputi* subsp. *cajuputi* on light brown sandy loam seasonal drainage flats.
– VT04 – Open woodland of *Adansonia gregorii, Corymbia dichromophloia* and *Corymbia zygophylla* over open woodland of *Lysiphyllum cunninghamii, Gyrocarpus americanus* subsp. *americanus* and *Hakea arborescens* on light brown sandy loam plains.

**Broome**

– VT05 - Variable from low open forest to open woodland (*Corymbia greeniana*, *C. zygophylla* and/or *C. flavescens*) with *Acacia eriopoda* or *A. eriopoda* x *tumida* var. *tumida* (tree form or occasionally shrub form where more recently burnt) and scattered *Acacia colei* var. *colei* on pindan plains and dunes of very low relief
– VT06 - Low open forest to tall shrubland (Pindan) dominated by *Acacia eriopoda* with emergent *Planchonia careyi*, *Corymbia greeniana* and *C. zygophylla* (occ. *Sersalisia sericea*) over scattered low trees of *Gyrocarpus americanus* subsp. *pachyphyllus*, *Hakea macrocarpa*, *Brachychiton diversifolius* subsp. *diversifolius* on pindan relict dune formation (aligns with Relict dune system dominated by extensive stands of Minyjuru (Mangarr – *Sersalisia sericea*) (P1 PEC)
– VT07 - Low open forest of *Eucalyptus tectifica* and **Azadirachta indica* over *Melaleuca cajuputi* subsp. *cajuputi*, *Melaleuca glomerata, Lysiphyllum cunninghamii* and *Acacia colei* var. *colei* on clay dampland
– VT08 - Sparse trees of *Avicennia marina* subsp. *marina* and ?*Ceriops australis* over a sparse low samphire shrubland of *Tecticornia ?pergranulata* subsp. *elongata, Neobassia astrocarpa* and *Sesuvium portulacastrum* subsp. *portulacastrum* on tidal mudflats.

**Halls Creek**

– VT09 - Open woodland of *Eucalyptus alba* var. *australasica* and *Corymbia ferruginea* subsp. *stypophylla* over closed shrubland of *Acacia trachycarpa, Acacia colei* and *Grevillea pyramidalis* subsp. *pyramidalis* on red/brown sandy loam on rocky gentle slopes/low rise to minor drainage line.
– VT10 - Open woodland of *Eucalyptus alba* var. *australasica* and *Corymbia ferruginea* subsp. *stypophylla* over open shrubland of *Acacia colei, Grevillea pyramidalis* subsp. *pyramidalis* and *Acacia ancistrocarpa* on brown sandy loam on rocky low hills and slopes.
– VT11 - Open woodland of *Eucalyptus alba* var. *australasica*, *Corymbia ferruginea* subsp. *stypophylla* and *Lysiphyllum cunninghamii* over open shrubland of *Acacia colei, Ehretia saligna* and *Gossypium australe* on brown loam clay on clay flats and rocky plains with a minor drainage line.

– VT12 - Open woodland of *Eucalyptus victrix* over isolated trees of *Melaleuca bracteata* over isolated shrubs of *Flueggea virosa* subsp. *melanthesoides* and **Leucaena leucocephala* subsp. *leucocephala* on brown gritty sandy loam on a moderate drainage line.

In addition, areas that have been modified with significant changes to the vegetation structure and no longer represent an intact vegetation type have been described and mapped separately, these include:

– Scattered natives over weeds/native herbs on road verges
– Landscaped areas and planted gardens (including *Adansonia gregorii*) and verge plantings
– Road verges, drains and infrastructure corridors that support regrowth of native forbs and grasses and are regularly cleared/graded
– Rehabilitation, tracks and laydown area that has been ripped and regrowing with native species

The vegetation types are described in further detail in Table 32 and mapped in Figure 4 (Camballin/Looma), Figure 10 (Derby), Figure 16 (Broome) and Figure 22 (Halls Creek), Appendix A.

*Table 32 Vegetation types within the survey area sites*

| Vegetation type | Vegetation Type Description | Extent (ha) and proportion of individual survey area (%) | Sampling sites | Photograph |
|---|---|---|---|---|
| VT01 | Open woodland of *Corymbia zygophylla* over open shrubland of *Acacia tumida, Grevillea refracta* and *Grevillea wickhamii* subsp. *aprica* over hummock grassland of *Triodia schinzii* over an open tussock grassland of *Aristida hygrometrica, Eragrostis setifolia* and *Eriachne ciliata* over open forbland of *Melhania oblongifolia, Tribulopis angustifolia* and *Boerhavia coccinea* on red-orange sandplain. | **Camballin/Looma**<br>4.09 ha (80.51%)<br>Site C: 3.53 ha<br>Connection route: 0.56 ha | Lo01, Lo02 |  |
| VT02 | Open woodland of *Corymbia dichromophloia, Adansonia gregorii* and *Lysiphyllum cunninghamii* over open shrubland (where more recently burnt) or tree form of *Acacia tumida* var. *kulparn* over open shrubland of *Alstonia linearis, Dodonaea hispidula* and *Brachychiton diversifolius* subsp. *diversifolius* over open tussock grassland of *Chrysopogon fallax, Eriachne obtusa* and *Aristida hygrometrica* over open forbland of *Trichodesma zeylanicum* var. *latisepaleum, Trianthema pilosum* and *Microstachys chamaelea* on light brown sandplain. | **Derby**<br>232.88 ha (35.52%)<br>Site P (230.51 ha)<br>Connections route (2.37 ha) | De01, De08, De09, DeR01 |  |

| Vegetation type | Vegetation Type Description | Extent (ha) and proportion of individual survey area (%) | Sampling sites | Photograph |
|---|---|---|---|---|
| VT03 | Open woodland of *Adansonia gregorii, Corymbia zygophylla* and *Corymbia opaca* over open woodland of *Lysiphyllum cunninghamii, Hakea arborescens* and *Melaleuca cajuputi* subsp. *cajuputi* over shrubland of *Flueggea virosa* subsp. *melanthesoides, Terminalia canescens* and *Calytrix exstipulata* over mixed open forbland of *Jasminum molle, Drosera derbyensis, Ptilotus polystachyus* and *Waltheria indica* on light brown sandy loam seasonal drainage flats. | **Derby**<br>172.31 ha (26.28%)<br>Site C (94.83 ha)<br>Site D (72.42 ha)<br>Connections route (5.06 ha) | De03, De10, De22, De23 |  |
| VT04 | Open woodland of *Adansonia gregorii, Corymbia dichromophloia* and *Corymbia zygophylla* over open woodland of *Lysiphyllum cunninghamii, Gyrocarpus americanus* subsp. *americanus* and *Hakea arborescens* over mixed shrubland of *Acacia monticola, Acacia tumida* var. *kulparn, Calytrix exstipulata* and *Flueggea virosa* subsp. *melanthesoides* over open hummock grassland of *Triodia caelestialis* over open tussock grassland of *Eriachne obtusa* and *Chrysopogon fallax* over mixed open forbland of *Solanum cunninghamii, Melhania oblongifolia, Waltheria indica* and *Trichodesma zeylanicum* var. *latisepaleum* on light brown sandy loam plains. | **Derby**<br>190.86 ha (29.11%)<br>Site I (25.11 ha)<br>Site C (31.76 ha)<br>Site D (99.18 ha)<br>Site O (28.55 ha)<br>Connections route (6.27 ha) | De24, De02, De06, De04, De05, De21, De07, DeR02, De11 |  |

| Vegetation type | Vegetation Type Description | Extent (ha) and proportion of individual survey area (%) | Sampling sites | Photograph |
|---|---|---|---|---|
| VT05 | Pindan on plains and dunes of low relief<br>Variable from low open forest to open woodland (*Corymbia greeniana*, *C. zygophylla* and/or *C. flavescens*) with *Acacia eriopoda* or *A. eriopoda* x *tumida* var. *tumida* (tree form or occasionally shrub form where more recently burnt) and scattered *Acacia colei* var. *colei* over scattered low mixed trees (*Ficus aculeata* var. *indecora*, *Gardenia pyriformis* subsp. *keartlandii, Brachychiton diversifolius* subsp. *diversifolius, Lysiphyllum cunninghamii* and others) over sparse mid shrubs (*Dodonaea hispidula* var. *arida* and *Dolichandrone occidentalis* and *Acacia adoxa* var. *subglabra* (sometimes dense) over sparse to open low shrubs of *Corchorus sidoides* subsp. *sidoides* (+/- Waltheria indica) over a tall forbland of *Trichodesma zeylanicum* var. *latisepalus* (+/- *Pterocaulon intermedium*) over hummock grassland to open hummock grassland of *Triodia caelestialis* over tussock grassland to sparse tussock grassland of *Chrysopogon pallidus* (+/- *Sorghum plumosum*, *Aristida* sp., *Eriachne obtusa*) on plains and dunes of very low relief. | **Broome**<br>908.73 ha (91.90%)<br>Site F (454.85 ha)<br>Site F Connection (16.75 ha)<br>Site G (222.82 ha)<br>Site G-H Connection (20.35 ha)<br>Site H (193.97 ha) | BR01, BR02, BR03, BR04, BR05, BR07, BR08, BR16, BR17, BR18, BR19, BR20, BR21, BRR01, BRR02, BRR10, BRR12, BRR14, BRR15 |  |
| VT06 | Pindan on relict dune formation with *Sersalisia sericea* (aligns with Relict dune system dominated by extensive stands of Minyjuru (Mangarr – *Sersalisia sericea*) (P1 PEC).<br>Low open forest to tall shrubland (Pindan) dominated by *Acacia eriopoda* with emergent *Planchonia careyi*, *Corymbia greeniana* and *C. zygophylla* (occ. *Sersalisia sericea*) over scattered low trees of *Gyrocarpus americanus* subsp. *pachyphyllus*, *Hakea macrocarpa*, *Brachychiton diversifolius* subsp. *diversifolius* over mid mixed sparse shrubland of *Ehretia saligna* var. *saligna* and *Dolichandrone occidentalis* over a sparse low shrubland of *Waltheria indica, Acacia adoxa* var. *adoxa* and *Corchorus sidoides* subsp. *sidoides* over a sparse tall forbland of *Trichodesma zeylanicum* var. *latisepaleum* over a hummock grassland of *Triodia caelestialis* over an open tussock grassland of *Chrysopogon pallidus*, *Sorghum plumosum* and *Eragrostis eriopoda*. | **Broome**<br>44.35 ha (4.48%)<br>Site F (44.35 ha) | BR06, BR09 |  |

| Vegetation type | Vegetation Type Description | Extent (ha) and proportion of individual survey area (%) | Sampling sites | Photograph |
|---|---|---|---|---|
| VT07 | Dampland<br><br>Low open forest of *Eucalyptus tectifica* and **Azadirachta indica* over *Melaleuca cajuputi* subsp. *cajuputi*, *Melaleuca glomerata, Lysiphyllum cunninghamii* and *Acacia colei* var. *colei* over a vineland of **Passiflora foetida* over a tussock grassland *Chrysopogon pallidus, Eragrostis speciosa* over a sparse sedgeland of *Cyperus conicus* over a low open grassland of *Cynodon ?dactylon* on clay dampland. | **Broome**<br>0.63 ha (0.06%)<br>Site F Connection (0.63 ha) | BRR11 |  |
| VT08 | Tidal mudflats<br><br>Sparse trees of *Avicennia marina* subsp. *marina* and *?Ceriops australis* over a sparse low samphire shrubland of *Tecticornia ?pergranulata* subsp. *elongata, Neobassia astrocarpa* and *Sesuvium portulacastrum* subsp. *portulacastrum* on tidal mudflats. | **Broome**<br>0.91 ha (0.09%)<br>Site F Connection (0.91 ha) | BRR13 |  |

| Vegetation type | Vegetation Type Description | Extent (ha) and proportion of individual survey area (%) | Sampling sites | Photograph |
|---|---|---|---|---|
| VT09 | Open woodland of *Eucalyptus alba* var. *australasica* and *Corymbia ferruginea* subsp. *stypophylla* over closed shrubland of *Acacia trachycarpa, Acacia colei* and *Grevillea pyramidalis* subsp. *pyramidalis* over open hummock grassland of *Triodia wiseana* over open tussock grassland of *Chrysopogon pallidus, Aristida pruinosa* and *Eriachne mucronata* over mixed open forbland of *Cucumis melo, Ipomoea polymorpha and Ptilotus calostachyus* on red/brown sandy loam on rocky gentle slopes/low rise to minor drainage line. | **Halls Creek**<br>15.53 ha (7.99%)<br>Subsite C3 (15.53 ha) | HC02, HCR11, HC05 |  |
| VT10 | Open woodland of *Eucalyptus alba* var. *australasica* and *Corymbia ferruginea* subsp. *stypophylla* over open shrubland of *Acacia colei, Grevillea pyramidalis* subsp. *pyramidalis* and *Acacia ancistrocarpa* over low open shrubland of *Acacia adoxa, Corchorus tridens* and *Indigofera monophyla* over open hummock grassland of *Triodia wiseana* over open tussock grassland of *Eulalia aurea, Cymbopogon procerus, Schizachyrium fragile* and *Aristida holathera* var. *holathera* over mixed open forbland of *Polycarpaea holtzei, Polygala galeocephala, Stackhousia intermedia* and *Trigastrotheca molluginea* on brown sandy loam on rocky low hills and slopes. | **Halls Creek**<br>45.82 ha (23.58%)<br>Site C (18.47 ha)<br>Subsite C3 (22.76 ha)<br>Connections route (4.59 ha) | HC01, HC03, HC07, HC10 |  |

| Vegetation type | Vegetation Type Description | Extent (ha) and proportion of individual survey area (%) | Sampling sites | Photograph |
|---|---|---|---|---|
| VT11 | Open woodland of *Eucalyptus alba* var. *australasica*, *Corymbia ferruginea* subsp. *stypophylla* and *Bauhinia cunninghamii* over open shrubland of *Acacia colei, Ehretia saligna* and *Gossypium australe* over tussock grassland of *Heteropogon contortus, Chrysopogon pallidus, Urochloa* sp. (indet) and *Eulalia aurea* over mixed open forbland of *Crotalaria medicaginea* var. *neglecta, Afrohybanthus aurantiacus* and *Indigofera linifolia* on brown loam clay on clay flats and rocky plains with a minor drainage line.<br>Aligns with Kimberley Vegetation Association No. 834 (P3 PEC) where it intersects with the pre-European vegetation association 834 boundary and/or buffer of the PEC boundary (DBCA 2024a). | **Halls Creek**<br>129.1 ha (66.43%)<br>Site C (23.37 ha)<br>Subsite C3 (87.21 ha)<br>Connections route (18.52 ha) | HC04, HC06, HC09 |  |
| VT12 | Open woodland of *Eucalyptus victrix* over isolated trees of *Melaleuca bracteata* over isolated shrubs of *Flueggea virosa* subsp. *melanthesoides* and **Leucaena leucocephala* subsp. *leucocephala* over closed tussock grassland of **Cenchrus ciliaris, Heteropogon contortus* and *Urochloa* sp. (indet) over open sedgeland of *Cyperus vaginatus* over open forbland of **Clitoria ternatea, Sesbania cannabina* and *Commelina ensifolia* on brown gritty sandy loam on a moderate drainage line. | **Halls Creek**<br>0.57 ha (0.29%)<br>Site C (0.57 ha) | HC08 |  |

| Vegetation type | Vegetation Type Description | Extent (ha) and proportion of individual survey area (%) | Sampling sites | Photograph |
|---|---|---|---|---|
| Scattered natives over weeds/native herbs | Occasional native tree/shrubs over weed/native herbs dominated understorey on road verges | **Derby**<br>1.15 ha (0.18%)<br>Site O (0.50 ha)<br>Connections route (0.66 ha)<br>**Broome**<br>1.91 ha (0.19%)<br>Site F Connection (1.91 ha) | |  |
| Planted native trees over weeds | Planted native *Corymbia/Eucalyptus* trees over weeds on maintained road verge | **Derby**<br>2.86 ha (0.44%)<br>Connections route (2.86 ha) | No site |  |

| Vegetation type | Vegetation Type Description | Extent (ha) and proportion of individual survey area (%) | Sampling sites | Photograph |
|---|---|---|---|---|
| Landscaped areas and planted gardens | Landscaped areas and planted gardens, street trees (including *Adansonia gregorii*) and verge plantings | **Broome**<br>1.96 ha (0.20%)<br>Site F Connection (1.96 ha) | No site |  |
| Cleared road-verge and drains with regrowth | Regularly cleared/graded road verges, drains and infrastructure corridors that support regrowth of native forbs and grasses | **Broome**<br>21.69 ha (2.19%)<br>Site F (2.56 ha)<br>Site F Connection (16.43 ha)<br>Site G H Connection (2.70 ha) | No site |  |

| Vegetation type | Vegetation Type Description | Extent (ha) and proportion of individual survey area (%) | Sampling sites | Photograph |
|---|---|---|---|---|
| Rehabilitation | Tracks and laydown area that has been ripped and regrowing with native species | **Broome**<br>0.71 ha (0.07%)<br>Site F (0.65 ha)<br>Site F Connection (0.07 ha) | No site |  |
| Cleared | Areas devoid of native vegetation, such as tracks and historically cleared areas. | **Camballin**<br>0.99 ha (19.48%)<br>Site C (0.75 ha)<br>Connection route (0.24 ha)<br>**Halls Creek**<br>3.33 ha (1.71%)<br>Site C (0.09 ha)<br>Subsite C3 (0.61 ha)<br>Connections route (2.63 ha)<br>**Derby**<br>55.64 ha (8.49%)<br>Site I (1.56 ha)<br>Site C (3.37 ha)<br>Site D (8.41 ha)<br>Site O (9.14 ha)<br>Site P (5.4 ha)<br>Connections route (27.76 ha)<br>**Broome** | |  |

| Vegetation type | Vegetation Type Description | Extent (ha) and proportion of individual survey area (%) | Sampling sites | Photograph |
|---|---|---|---|---|
| | | 7.97 ha (0.81%)<br>Site F (3.66 ha)<br>Site F Connection (3.42 ha)<br>Site G & H Connection (0.89 ha) | | |

### 7.1.2 Significant vegetation communities

**Camballin/Looma**

No TECs listed under the EPBC Act or BC Act or PECs listed by DBCA were identified within the Camballin/Looma survey area during the field survey.

**Derby**

No TECs listed under the EPBC Act or BC Act or PECs listed by DBCA were identified within the Derby survey area during the field survey.

**Broome**

One PEC was recorded within Site F: Relict dune system dominated by extensive stands of Minyjuru (Mangarr – *Sersalisia sericea*) (P1 PEC). Linear dune formations are visible from aerial imagery running east-west. On the ground, any elevation changes are barely discernible as these dunes have eroded over time. The vegetation in these areas was slightly sparser than the surrounding areas of pindan and contain occasional *Sersalisia sericea.* Numbers of this species may be declining over time due to the frequency of fire. Relict dune system comprises 44.35 ha (4.48%) of the survey area and is shown on Figure 16, Appendix A.

The survey area occurs within the buffer of the Species-rich faunal community of the intertidal mudflats of Roebuck Bay TEC. A small area of mudflat is mapped within F corridor. This is on the periphery of the Roebuck Bay system, however as it is separated from the greater area of mudflats by the main road, and is mostly cleared and located at the eastern end of the Broome airport airstrip, is not considered to represent this TEC.

Monsoon Vine Thickets of the Dampier Peninsula (TEC) and Kimberley Vegetation Association No. 73 (P3) have not been mapped within the survey area.

**Halls Creek**

One PEC was identified as occurring within the Halls Creek survey area and occurs across all sites (Site C, Subsite C3 and the Connection Route) the Kimberley Vegetation Association No. 834 (P3 PEC). This PEC is described as a community consisting of grasslands, tall bunch grass savanna, Mitchell and blue grass species, including *Astrebla* sp. (DBCA 2023). VT11 open woodland of *Eucalyptus alba* var. *australasica*, *Corymbia ferruginea* subsp. *stypophylla* and *Lysiphyllum cunninghamii* on brown loam clay on clay flats and rocky plains with a minor drainage line was representative of this PEC due to it having a grassland dominant understorey typical of a savanna on loam/clay plains, supporting species such as *Heteropogon contortus, Chrysopogon pallidus, Urochloa* sp. (indet) and *Eulalia aurea*. The PEC was assigned to VT11 where this vegetation type intersected with the pre-European vegetation association 834 boundary and/or buffer of the PEC boundary (DBCA 2024a) and is shown on Figure 22, Appendix D.

### 7.1.3 Other vegetation of interest

For all the survey areas at each site, none of the vegetation types represent significant vegetation as categorised by the EPA (2016) including vegetation with a restricted distribution, historical impacts from threatening processes, a role as a refuge or providing an important function required to maintain ecological integrity of a significant ecosystem. The recorded vegetation types within the survey areas are widespread outside the survey area.

### 7.1.4 Vegetation condition

The condition of the vegetation within the survey areas ranged from Excellent to Completely Degraded. Most sites have areas that are completely cleared which have been presented separately. The majority of the survey areas are in Excellent or Very Good condition. The vegetation condition extents are detailed below for each survey area.

**Camballin/Looma**

The majority of the vegetation within the survey area (Site C) is in Excellent (69.46%) condition with limited signs of disturbances and typical vegetation structure and diversity recorded, with the main disturbance being the track and associated existing infrastructure. Presence of weeds such as **Cenchrus ciliaris* occurred opposite the track in low covers in the connection route survey area, which reduced the vegetation condition to Very Good (11.06%).

The extents of the vegetation condition within the Camballin/Looma are detailed in Table 33 and mapped in Figure 5, Appendix A.

*Table 33 Vegetation condition extents – Camballin/Looma*

| Vegetation Condition | Site C | Connection Route | Total (ha) and percentage of total |
|---|---|---|---|
| Excellent | 3.53 ha (82.44%) | - | 3.53 ha (69.46%) |
| Very Good | 0.002 ha (0.04%) | 0.56 ha (70.0%) | 0.562 (11.06%) |
| Cleared | 0.75 ha (17.52%) | 0.24 ha (30.0%) | 0.99 (19.48%) |
| **Total** | 4.282 ha (100.00) | 0.8 ha (100.00%) | 5.082 ha (100.00%) |

### Derby

Vegetation condition of the Derby survey areas ranged from Very Good to Completely Degraded (cleared roadsides with regrowth of native forbs and grasses). The majority of the survey area was in Very Good condition (514.55 ha / 78.47 %). Vegetation that was rated as Good or Degraded had signs of disturbance through clearing for road and track maintenance, presence of weeds and/or clearing for historic gravel extraction.

Areas of vegetation condition across Sites C, D, I, O, P and Connection Route is given in Table 34 and mapped in Figure 11, Appendix A.

*Table 34 Vegetation condition extents – Derby*

| Vegetation Condition | Site C | Site D | Site I | Site O | Site P | Connection Route | Total (ha) and percentage of total. |
|---|---|---|---|---|---|---|---|
| Very Good | 123.26 ha (94.85%) | 144.42 ha (80.23%) | 19.41 ha (72.79%) | 14.27 ha (37.37%) | 213.01 ha (90.29%) | 0.19 ha (0.41%) | 514.55 ha (78.47%) |
| Good | 2.25 ha (1.73%) | 23.33 ha (12.96%) | 1.39 ha (5.19%) | 9.62 ha (25.19%) | 12.96 ha (5.49%) | 5.03 ha (11.18%) | 54.57 ha (8.32%) |
| Degraded | 1.08 ha (0.83%) | 3.85 ha (2.14%) | 4.27 ha (16.00%) | 4.66 ha (12.21%) | 4.39 ha (1.86%) | 8.48 ha (18.86%) | 26.73 ha (4.08%) |
| Completely Degraded | - | - | 0.05 ha (0.17%) | 0.50 ha (1.30%) | 0.15 ha (0.06%) | 3.51 ha (7.81%) | 4.20 ha (0.64%) |
| Cleared | 3.37 ha (2.59%) | 8.41 ha (4.67%) | 1.56 ha (5.84%) | 9.14 ha (23.93%) | 5.4 ha (2.29%) | 27.76 ha (61.73%) | 55.64 ha (8.49%) |
| Total | 129.95 ha | 180.01 ha | 26.66 ha | 38.17 ha | 235.91 ha | 44.97 ha | 655.69 ha |

### Broome

Vegetation condition of the Broome survey areas ranged from Excellent (large continuous areas of Pindan) to Completely Degraded (cleared roadsides with regrowth of native forbs and grasses). The majority of the survey area was in Excellent condition (923.80 ha / 93.42%). Areas of vegetation condition across Site F, G, H and Connection Route is given in Table 35 and mapped in Figure 17, Appendix A.

*Table 35 Vegetation condition – Broome*

| Condition | Site F | Site F Connection Route | Site G-H Connection Route | Site G | Site H | Total (ha) and percentage of total. |
|---|---|---|---|---|---|---|
| Excellent | 499.19 ha | 0 | 17.68 | 222.82 | 184.10 | 923.80 ha (93.42%) |
| Very Good | 0 | 8.48 | 2.66 | 0 | 0 | 11.14 ha (1.13%) |
| Good | 0 | 3.62 | 0 | 0 | 9.87 | 13.49 ha (1.36%) |

| Condition | Site F | Site F Connection Route | Site G-H Connection Route | Site G | Site H | Total (ha) and percentage of total. |
|---|---|---|---|---|---|---|
| Degraded | 0 | 5.27 | 0 | 0 | 0 | 5.27 ha (0.53%) |
| Completely Degraded | 2.56 | 19.24 | 2.70 | 0 | 0 | 24.50 ha (2.48%) |
| Rehabilitation | 0.65 | 0.07 | 0 | 0 | 0 | 0.71 ha (0.07%) |
| Cleared | 3.66 | 5.38 | 0.89 | 0 | 0 | 9.93 ha (1.00%) |
| Total | 506.05 | 42.07 | 23.94 | 222.82 | 193.97 | 988.85 |

**Halls Creek**

Vegetation condition of the Halls Creek survey areas ranged from Excellent to Degraded, with some areas completely cleared. The majority of the survey area was in Excellent condition (125.5 ha / 64.58%) and Very Good condition (47.12 ha / 24.25%) with intact vegetation structure, minimal weed presence and typical native species diversity. Areas that were rated as Good (8.31%) or Degraded (1.16%) had signed of previous clearing/track maintenance, higher cover of weed species and lower native species diversity.

Areas of vegetation condition across Site C, Subsite C3 and Connection Route are included in Table 36 and mapped in Figure 23, Appendix A.

*Table 36 Vegetation condition – Halls Creek*

| Condition | Site C | Subsite C3 | Connection Route | Total (ha) and percentage of total. |
|---|---|---|---|---|
| Excellent | - | 125.5 ha (99.52%) | - | 125.5 ha (64.58%) |
| Very Good | 38.93 ha (89.93%) | - | 8.19 ha (31.82%) | 47.12 ha (24.25%) |
| Good | 1.55 ha (3.58%) | - | 14.59 ha (56.68%) | 16.14 ha (8.31%) |
| Degraded | 1.93 ha (4.46%) | - | 0.33 ha (1.28%) | 2.26 ha (1.16%) |
| Cleared | 0.88 ha (2.03%) | 0.61 ha (0.48%) | 2.63 ha (10.22%) | 3.32 ha (1.71%) |
| Total | 43.29 ha | 126.11 ha | 25.74 ha | 194.34 ha |

### 7.1.5 Flora diversity

A total of 364 vascular flora species from 62 families and 178 genera (including subspecies and variants) were recorded across all sites. The dominant plant families were Fabaceae, Poaceae and Malvaceae, with *Acacia, Corymbia* and *Goodenia* the most frequently recorded genera. An overall species list is presented in Appendix D.

**Camballin/Looma**

A total of 46 vascular flora species from 25 families and 40 genera (including subspecies and variants) were recorded from the survey area. Dominant plant families were Fabaceae, Poaceae and Malvaceae, with *Acacia, Eriachne, Grevillea, Senna* and *Zornia* the most frequently recorded genera. A total of six taxa were tentatively identified (one to family level, two to genus level and three to species level) due to insufficient material for identification (such as flowers/fruit). Of the flora species recorded, 96% were native taxa. A species list is presented in Appendix D.

**Derby**

A total of 136 vascular flora species from 39 families and 91 genera (including subspecies and variants) were recorded from the survey area. A total of 50 vascular flora species were recorded from Site D, 22 from Site I, 29 from Site O, 28 from Site P, 28 from Site C and 15 from Site D. Dominant plant families were Fabaceae, Poaceae and Malvaceae, with *Corymbia, Acacia, Abutilon* and *Euploca* the most frequently recorded genera. A total of 13 taxa were tentatively identified (ten to genus level and three to species level) due to insufficient material for identification (such as flowers/fruit). Of the flora species recorded, 93% were native taxa. A species list and species list by site is presented in Appendix D.

**Broome**

A total of 174 vascular flora species from 48 families and 118 genera (including subspecies and variants) were recorded from the survey area. A total of 86 vascular flora species were recorded from Site F, 38 from Site G, 47 from Site H, 26 from F Connection and 16 from G-H Connection. The dominant plant families were Fabaceae, Poaceae and Malvaceae, with *Acacia, Corymbia* and *Aristida* the most frequently recorded genera. A total of 39 taxa were tentatively identified (nine to genus level, 30 to species level) due to insufficient material for identification (such as flowers/fruit, or due to insect damage). Of the flora species recorded, 92% were native taxa. A species list is presented in Appendix D.

**Halls Creek**

A total of 135 vascular flora species from 39 families and 93 genera (including subspecies and variants) were recorded from the survey area. A total of 63 vascular flora species were recorded from Site C, 55 from Subsite C3 and 35 from the Connection. Dominant plant families were Fabaceae, Poaceae and Malvaceae, with *Acacia, Goodenia, Indigofera* and *Ptilotus* the most frequently recorded genera. A total of seven taxa were tentatively identified (six to genus level and one to species level) due to insufficient material for identification (such as flowers/fruit). Of the flora species recorded, 93% were native taxa. A species list and species list by site is presented in Appendix D.

### 7.1.6 Introduced flora

The BAM Act states that a Weed of National Significance (WONS) with a control category of C3 (Management/Exempt) should have some form of management applied that will alleviate the harmful impact of the organism, reduce the numbers or distribution, or prevent or contain the spread of the organism. This applies to the **Jatropha gossypiifolia* (Bellyache Bush, Cotton-leaf Physic Nut) recorded at Derby.

**Camballin**

Two introduced flora species were recorded within the survey area representing 4% of the total flora species recorded. No declared pests under the BAM Act or WONS were recorded within the survey area.

**Derby**

Ten introduced flora species were recorded within the Derby survey area representing 7% of the total flora species recorded. Two declared pests under the BAM act were recorded within the survey area:

– **Azadirachta indica* (Neem) has s22(2) legal status and 'exempt' keeping category.
– **Jatropha gossypiifolia* (Bellyache Bush, Cotton-leaf Physic Nut) has s22(2) legal status and 'exempt' keeping category. This species is also listed as a WONS.

**Azadirachta indica* is a fast-growing tree that can reach a height of 15 to 20 metres. Originally planted in many Kimberley communities as a shade tree, Neem can readily spread from cultivated populations into natural environments. The seeds are dispersed by fruit-eating birds and bats, as well as spread down watercourses (Navie et al. 2008). Seedlings can germinate and grow in deep shade, mature trees can withstand fire (Navie et al. 2008). *A. indica* coppices readily from roots and shoots, making removal by hand difficult (Navie et al. 2008).

**A. indica* was recorded from all sites.

**Jatropha gossypiifolia* is an erect shrub to small tree (up to 4 m high) (DPIRD 2020). *J. gossypiifolia* reproduces from seeds and vegetatively from broken stems and roots (Csurhes 1999). Prolific seedling emergence can occur for at least four years following destruction of mature plants (Csurhes 1999). It is known to invade disturbed areas and waterways, the shallow root system and canopy cover restricts the growth of other plants (DPIRD 2020)

**J. gossypiifolia* was recorded from Site C only.

**Broome**

A total of 14 introduced flora species were recorded within the survey area representing 8% of the total flora species recorded. One declared pest under the BAM act was recorded within the survey area: **Azadirachta indica* (Neem) has s22(2) legal status and 'exempt' keeping category.

*A. indica* was recorded in disturbed areas, well established in vegetation on the verge of Broome Road (F Connection) and within Area H (disturbed areas around cattle yards).

**Halls Creek**

A total of nine introduced flora species were recorded within the survey area representing 7% of the total flora species recorded. One declared pest under the BAM act was recorded within the survey area: **Azadirachta indica* (Neem) has s22(2) legal status and 'exempt' keeping category.

**A. indica* was recorded from Site C only.

## 7.1.7 Significant flora

No EPBC Act or BC Act listed flora were recorded from any of the survey areas.

**Camballin/Looma**

One DBCA listed priority flora taxa, *Polymeria* ?sp. Broome (K.F. Kenneally 9759) (P3) was tentatively recorded from the Camballin/Looma survey area. The collection did not have flowers and therefore could not be confirmed to species level, however, has several other characters that align with this taxon. A total of eight individuals were recorded from two locations associated with quadrats Lo01 and Lo02.

*Polymeria* sp. Broome (K.F. Kenneally 9759) is known from the Dampierland bioregion, north and south of Broome near the coast and an historic outlier east near Fitzroy Crossing in the Great Sandy Desert bioregion (Western Australian Herbarium). This tentatively record is the first collection in this area, however, not considered a range extension as this tentative record is within the known taxon range.

The locations of these records are mapped on Figure 4, Appendix A. The species data is presented in Appendix D.




***Plate 6 Polymeria ?sp. Broome (K.F. Kenneally 9759) (P3) specimen***

**Derby**

One DBCA listed priority flora species, *Haemodorum capitatum* (P1), was recorded from the Derby survey area. It was recorded from Site D. One hundred individuals were recorded from one locality with the area subject to a recent fire with the plants re-shooting from an underground bulb (Plate 7). One individual was flowering, which allowed for species confirmation at the WA Herbarium (Plate 8).

*Haemodorum capitatum* (P1) is known from four previous records collected from Cape Leveque and approximately 100 km east of Broome (Western Australian Herbarium). This record from Derby is the first collection from this region and also represents a range extension for the species approximately 100 km north east of its currently known distribution (Western Australian Herbarium).

The locations of these records are mapped on Figure 10, Appendix A. The species data is presented in Appendix D.



*Plate 7 Haemodorum capitatum (P1) plant and bulb*



*Plate 8 Haemodorum capitatum (P1) flower*

**Broome**

Seven priority flora species were recorded from the Broome survey areas including:

– *Bonamia oblongifolia* (P3)
– *Acacia monticola x tumida* var. *kulparn* (P3)
– *Glycine pindanica* P3
– *Jacquemontia* sp. Broome (A.A. Mitchell 3028) (P1)
– *Polymeria* sp. Broome (K.F. Kenneally 9759) (P3)
– *Terminalia kumpaja* (P3)
– *Corymbia ? paractia* (P1)

*Bonamia oblongifolia* (P3) has a sparse distribution with records at Eighty-mile beach, 90 km south of Broome and north of Broome (Cape Leveque) (Western Australian Herbarium 2024). Five individuals from five locations were recorded within the survey area, one was tentatively identified as *Bonamia ?oblongifolia* due to sterile material. It was recorded from Sites G, F and H.

*Acacia monticola x tumida* var. *kulparn* (P3) has a distribution from Eighty-mile Beach, with records in the vicinity of Broome, records along Cape Leveque to One Arm Point and east of Derby (Western Australian Herbarium 2024). A putative hybrid, this plant varies from low-domed spreading shrubs in wind-swept coastal habitats, to tall shrubs growing to four metres high further inland (Maslin 2018). One individual from one location was recorded within the survey area (Site H).

*Glycine pindanica* (P3) is a prostrate creeper, with mauve, purplish-mauve or blue flowers (Plate 9) that appear from February to April in the wet season, if rain persists flowers can occur until June (Tindale and Craven 1993) has a restricted distribution around Broome and the Dampier Peninsula (Western Australian Herbarium 2024). It is known to occur on the red-brown Pindan soils, where it can be locally common (Tindale and Craven 1993). A total of 13 individuals were recorded along the Broome-Cape Leveque Road verge, (Site F connection, or edge of Site F) (Plate 10).

*Jacquemontia* sp. Broome (A.A. Mitchell 3028) (P1) is a creeping herb to 0.3 m with light mauve flowers (Western Australian Herbarium 2024) (Plate 11). It has previously been recorded from Pindan vegetation in the vicinity of Broome and north of Broome near the Quondong Point road turn-off and near Beagle Bay (Western Australian

Herbarium 2024). A total of 25 individuals were recorded from six locations within VT05 (Pindan) at Site F, Site F connection and Site G.

*Polymeria* sp. Broome (K.F. Kenneally 9759) (P3) has a scattered distribution from approximately 90 km south of Broome to North of Broome (Dampier Peninsula, 13 km west south west of Beagle Bay) with disjunct occurrences between Derby and Fitzroy Crossing and 75 km east north east of Sandfire (Western Australian Herbarium 2024). It has trailing stems and occurs in Pindan and on road verges in Broome (Plate 10), with flowering recorded May (Kenneally et al. 1996). Similar in appearance to the common *Polymeria ambigua,* differing in having only two, rather than four to eight stigmatic branches (Kenneally et al. 1996) (Plate 12). A total of 329 individuals were recorded within the survey area from all sites, with an additional 117 tentatively identified as *Polymeria* ?sp. Broome (K.F. Kenneally 9759), as they were not flowering at the time of collection.



***Plate 9 Glycine pindanica P3 flower***



***Plate 10 Glycine pindanica P3 and Polymeria sp. Broome (K.F. Kenneally 9759 habit, growing together on road verge***



***Plate 11 Jacquemontia* sp. Broome (K.F. Kenneally 9759) P1 flower**



***Plate 12 Polymeria sp. Broome (K.F. Kenneally 9759) flower with two stigmatic branches visible***

*Terminalia kumpaja* (P3) is a shrub or small spreading tree two to six metres high, with a globular, succulent fruit (Barrett 2015) (Plate 13 & Plate 14). It is restricted to red pindan soils, with known populations around the vicinity of Wallal Downs and Madora Station and more scattered populations present on old sand-dune systems on the Dampier Peninsula around Broome (Barrett 2015). A total of 15 individuals were recorded from two locations within the survey area, including a grove of 12 individuals in fruit at Site H and three at Site F.

*Corymbia paractia* (P1) is a tree or mallee to eight (-12) metres high, apparently restricted to a narrow coastal zone in the Broome area where beach dunes merge into pindan soils, immediately behind the dunes (Kenneally et

al. 1996) (Centre for Australian National Biodiversity Research 2020). *C. paractia* is considered to be a stabilised hybrid between *Corymbia dendromerinx* and *C. flavescens,* exhibiting intermediate features between these two species (Hill and Johnson 1995). Specimens collected from the vicinity of a known record of *C. paractia* were tentatively identified as *C. ? paractia* due to sterile material, with 36 individuals recorded from F Connection only (Plate 15).



***Plate 13 Terminalia kumpaja habit***



***Plate 14 Terminalia kumpaja fruit***



***Plate 15 Corymbia paractia* P1**

### Halls Creek

One DBCA listed priority flora species, *Goodenia crenata* (P3), was recorded from the Halls Creek survey area. It was recorded from Subsite C3. Eighteen individuals were recorded from three separate areas within Subsite C3.

*Goodenia crenata* (P3) has been previous collected over a wide area of the Central Kimberley, Ord Victoria Plain, Tanami bioregions including from the Halls Creek local government area (Western Australian Herbarium). The species was currently in flower (Plate 16). The locations of these records are mapped on Figure 22, Appendix A. The species data is presented in Appendix D.



*Plate 16 Goodenia crenata (P3) flowering specimen*

***Likelihood of occurrence***

Following the field survey and flora identification, a post-field survey likelihood of occurrence assessment was conducted (Appendix D). This assessment considered previous record, habitat requirements efficacy of the survey, intensity of the survey, flowering periods and the cryptic nature of species.

**Camballin/Looma**

The likelihood of occurrence assessment post-field survey concluded that one taxon is tentatively known, *Polymeria* ?sp. Broome (K.F. Kenneally 9759) (P3). The remaining taxa are either unlikely or highly unlikely to occur due to a combination of known distribution, lack of suitable habitat and suitable search effort.

**Derby**

The likelihood of occurrence assessment post-field survey concluded that one taxon is known *Haemodorum capitatum* (P1), which is a range extension and not previously known in the desktop study area. The remaining taxa are either unlikely or highly unlikely to occur due to a combination of known distribution, lack of suitable habitat and suitable search effort.

**Broome**

The likelihood of occurrence assessment post-field survey concluded that seven taxa are known; *Bonamia oblongifolia* (P3), *Acacia monticola x tumida* var. *kulparn* (P3), *Glycine pindanica* P3, *Jacquemontia* sp. Broome (A.A. Mitchell 3028) (P1), *Polymeria* sp. Broome (K.F. Kenneally 9759) (P3), *Terminalia kumpaja* (P3) and *Corymbia ? paractia* (P1). *Corymbia ? paractia* (P1) was tentatively recorded as the specimen collected was sterile. The remaining taxa are either unlikely or highly unlikely to occur due to a combination of known distribution, lack of suitable habitat and suitable search effort.

**Halls Creek**

The likelihood of occurrence assessment post-field survey concluded that one taxon is known, *Goodenia crenata* (P3). The remaining taxa are either unlikely or highly unlikely to occur due to a combination of known distribution, lack of suitable habitat and suitable search effort.

## 7.1.8 Flora of interest and range extensions

**Camballin/Looma**

No flora recorded in the survey area represented range extensions, flora of interest, such as undescribed species or taxonomic anomalies.

**Derby**

*Haemodorum capitatum* (P1) recorded within the survey area represent range extensions (R.E) as discussed above as this record is the first collection from this region and also represents a range extension for the species approximately 100 km north east of its currently known distribution (Western Australian Herbarium).

The record of *Gyrocarpus americanus* subsp. *americanus* represents a range extension south west of approximately 160 km from the nearest record (Western Australian Herbarium). This species was recorded from Sites D, I and C.

No other flora taxa recorded from the survey areas represented range extensions, flora of interest, such as undescribed species or taxonomic anomalies.

**Halls Creek**

No flora taxa recorded from the survey areas represented range extensions, flora of interest, such as undescribed species or taxonomic anomalies.

**Broome**

A total of three species recorded within the survey area represent range extensions (R.E) from the species current known range. These taxa include:

– *Neptunia ?major* (south-western most record, not previously recorded from the Dampier Peninsula)
– *Gyrocarpus americanus* subsp. *americanus* (south-westernmost record, not previously recorded from the Dampier Peninsula)
– *Melaleuca ?glomerata* (not previously recorded from the Dampier Peninsula).

### 7.1.9 Riparian vegetation

Riparian vegetation was recorded at Derby (VT03), Broome (VT07 and VT08), and Halls Creek (VT09, part of VT11 and VT12).

The riparian areas at Halls Creek were identified as minor drainage lines, containing mature Eucalyptus and Corymbia and *Lysiphyllum cunninghamii* trees, and moderate drainage lines containing mature Eucalyptus and Corymbia, and *Melaleuca bracteata* trees over isolated shrubs of *Flueggea virosa* subsp. *melanthesoides* and **Leucaena leucocephala* subsp. *leucocephala*.

The Derby site contained seasonal drainage flats (representing VT03), and contained trees of *Adansonia gregorii, Corymbia zygophylla*, *Corymbia opaca* and *Lysiphyllum cunninghamii.*

The Broome site contained a small patch of open *Eucalyptus tectifica* clay dampland (VT07) with vines of **Passiflora foetida* over a tussock grassland of *Chrysopogon pallidus, Eragrostis speciosa* over a sparse sedgeland of *Cyperus conicus*. Broome also contained a small area of mangrove tidal mudflats (VT08) with sparse trees of *Avicennia marina* subsp. *marina* and sparse samphire shrubland.

### 7.1.10 Additional local trees – Derby

The additional large tree species for the Derby survey areas only recorded 963 individuals from the following species:

– 556 *Adansonia gregorii* (Boab)
– 61 *Bauhinia cunninghamii*
– 34 *Corymbia dichromophloia*
– One *Corymbia grandifolia*
– 19 *Corymbia greeniana*
– 79 *Corymbia opaca*
– 29 *Corymbia* sp. (indet)
– 33 *Corymbia zygophylla*
– 97 *Eucalyptus miniata*

# 7.2 Fauna

## 7.2.1 Fauna habitats

13 broad fauna habitat types were identified and mapped within the survey area (excluding cleared and degraded areas) and included:

**Derby**

1- Mixed tall closed woodland sandplain

2- Mixed tall open shrubland sandplain

3- Open Eucalypt woodland

**Camballin**

1. Mixed tall open shrubland plain

**Halls Creek**

1. Open Eucalypt woodland clay plain
2. Acacia shrubland thicket
3. Minor drainage line
4. Rocky hills and slopes

**Broome**

1. Pindan shrubland plain
2. Pindan shrubland relict dunes
3. Open Eucalypt dampland
4. Sparse mangrove tidal mudflat
5. Scattered plantings and native trees

The habitat types are categorised based on flora species and composition, hydrology, landform, soil and topography. The habitat types recorded in the survey area are described in further detail in Table 37 and mapped in Figure 6 (Camballin) Figure 12 (Derby) Figure 18 (Broome) and Figure 24 (Halls Creek).

*Table 37 Fauna habitat types within the survey area*

| Habitat Type | Description | Extent (ha) and proportion of survey area (%) | Representative Images |
|---|---|---|---|
| **Derby** | | | |
| 1 – Mixed tall closed woodland and sandplain | Open woodland of *Adansonia gregorii, Corymbia dichromophloia* and *Corymbia zygophylla* over open woodland of *Lysiphyllum cunninghamii, Gyrocarpus americanus* subsp. *americanus* and *Hakea arborescens* on light brown sandy loam plains.<br><br>**Significant fauna**<br>The Northern Blue-tongue Skink (CR) was recorded at Sites P, C and O and is highly likely to occur across all habitats at Derby.<br>Fork-tailed Swift (MI) was recorded in area O, as is likely to occur at least on a seasonal basis across all habitats.<br>Oriental Cuckoo (MI) was recorded in area D and is likely to occur over all habitats.<br>The Northern Coastal Free-tailed Bat (P1) was recorded at Derby. It is likely to roost in tree hollows in all habitats.<br>The Gouldian Finch (EN/P4) is likely to occur at Derby due to the presence of suitable foraging habitat (seasonal grasses).<br>The Grey Falcon (VU) is likely to occur due to local and regional occurrences, and there is foraging habitat available in the survey area. Would occur at least on an occasional basis.<br>The Peregrine Falcon (OS) is likely to occur at Derby due to local and regional occurrences, and there is suitable foraging habitat. Would occur at least on an occasional basis.<br>The Barn Swallow (MI) is likely to occur in Derby at least on an occasional basis and during the non-breeding season.<br>The Yellow Wagtail (MI) is known to occur locally and in the wider region. It is expected to occur at least on an occasional basis. | 165.75 ha (25.28%)<br>Site C (31.76 ha)<br>Site D (99.18 ha)<br>Site O (28.55 ha)<br>Site I (25.11 ha)<br>Connections route (6.27 ha) |  |

| Habitat Type | Description | Extent (ha) and proportion of survey area (%) | Representative Images |
|---|---|---|---|
| | The Northern Brush-tailed Possum (VU) is likely to occur namely in closed canopy cover habitat in Sites O, C, D and I.<br>**Habitat value**<br>High | | |
| 2 – Mixed tall open shrubland and sandplain | Open woodland of *Adansonia gregorii, Corymbia zygophylla* and *Corymbia opaca* over open woodland of *Lysiphyllum cunninghamii, Hakea arborescens* and *Melaleuca cajuputi* subsp. *cajuputi* on light brown sandy loam seasonal drainage flats.<br>**Significant fauna**<br>The Northern Coastal Free-tailed Bat (P1) was recorded at Derby. It is likely to roost in suitable tree hollows in all habitats.<br>Fork-tailed Swift (MI) was recorded in area O, as is likely to occur at least on a seasonal basis across all habitats.<br>Oriental Cuckoo (MI) was recorded in area D and is likely to occur over the entirety of habitats.<br>The Northern Blue-tongue Skink (CR) was recorded at Sites P, C and O and is highly likely to occur across all habitats.<br>The Gouldian Finch (EN/P4) is likely to occur at Derby due to the presence of suitable foraging habitat (seasonal grasses) and potential water availability.<br>**Habitat value**<br>High | 172.31 ha (26.28%)<br>Site C (94.83 ha)<br>Site D (72.42 ha)<br>Connections route (5.06 ha) |  |

| Habitat Type | Description | Extent (ha) and proportion of survey area (%) | Representative Images |
|---|---|---|---|
| 3 – Open Eucalypt woodland | Open woodland of *Corymbia dichromophloia, Adansonia gregorii* and *Lysiphyllum cunninghamii* over open shrubland (where more recently burnt) or tree form of *Acacia tumida* var. *kulparn* on light brown sandplain.<br><br>**Significant fauna**<br>The Northern Coastal Free-tailed Bat (P1) was recorded at Derby. It is likely to roost in suitable tree hollows in all habitats.<br>Fork-tailed Swift (MI) was recorded in area O, as is likely to occur at least on a seasonal basis across all habitats.<br>Oriental Cuckoo (MI) was recorded in area D and is likely to occur over all habitats.<br>The Northern Blue-tongue Skink (CR) was recorded at Sites P, C and O and is highly likely to occur across all habitats.<br>The Gouldian Finch (EN/P4) is likely to occur at Derby due to the presence of suitable foraging habitat (seasonal grasses).<br>The Grey Falcon (VU) is likely to occur due to local and regional occurrences, and there is foraging habitat available in the survey area. Would occur at least on an occasional basis.<br>The Peregrine Falcon (OS) is likely to occur at Derby due to local and regional occurrences, and there is suitable foraging habitat. Would occur at least on an occasional basis.<br>The Barn Swallow (MI) is likely to occur in Derby at least on an occasional basis and during the non-breeding season.<br>The Yellow Wagtail (MI) is known to occur locally and in the wider region. It is expected to occur at least on an occasional basis.<br>**Habitat value**<br>High | 232.88 ha (35.52%)<br>Site P (230.51 ha)<br>Connections route (2.37 ha) |  |

| Habitat Type | Description | Extent (ha) and proportion of survey area (%) | Representative Images |
|---|---|---|---|
| 4 – Scattered native trees (road verge) | **Significant fauna**<br>Nil<br>**Habitat value**<br>Low | 4.01 ha (0.61%)<br>Site O (0.50 ha)<br>Connections route (3.51 ha) |  |
| 5 – Cleared areas | **Significant fauna**<br><br>**Habitat value**<br>Nil | 55.64 ha (8.49%)<br>Site C (3.37 ha)<br>Site D (8. ha)<br>Site O (28.55 ha)<br>Site I (1.56 ha)<br>Connections route (6.27 ha) |  |

| Habitat Type | Description | Extent (ha) and proportion of survey area (%) | Representative Images |
|---|---|---|---|
| **Camballin** | | | |
| 1 - Mixed tall open shrubland plain | Open woodland of *Corymbia zygophylla* over open shrubland of *Acacia tumida*, *Grevillea refracta* and *Grevillea wickhamii* subsp. *aprica* on red-orange sandplain.<br><br>**Significant fauna**<br>The Fork-tailed Swift (MI) is likely to occur across the site during the seasonal non-breeding period. The species forages aerially over habitat.<br>The Gouldian Finch (EN/P4), Grey Falcon (VU), Peregrine Falcon (OS), Barn Swallow (MI) and Princess Parrot (VU) are all likely to occur as the habitat is assessed as suitable for foraging and they could occur at least on an occasional basis.<br>There is no suitable roost habitat for the Ghost Bat (VU) within the survey area, however there is extensive potential roost habitat (rocky breakaway) in proximity to survey area, and therefore likely to support species foraging, at least on an occasional basis.<br>Bilby (VU) is likely to occur as the habitat is assessed as suitable for foraging and could occur at least on an occasional basis.<br>The habitat appears suitable for the Northern Short-tailed mouse (P4), in the form of sandplain with tussock and hummock grasses, and sparse shrubland on clayey soil.<br>There is suitable rocky habitat in proximity of the survey area for the West Kimberley Rock -Wallaby (EN), and therefore may use the survey area for foraging.<br>Northern Blue-tongue Skink (CR) is likely to occur due to suitable habitat. The species can occur in a diverse range of habitats, but need adequate shelter in the form of shrubbery, thick grasses or leaf litter.<br>Yellow-lipped cave bat (P2) is likely to roost nearby and forage within survey area as there is extensive rocky breakaway (possible roost habitat) located in close proximity of the survey area. | 4.09 ha (80.51%)<br>Site C: 3.53 ha<br>Connection route: 0.56 ha |  |

| Habitat Type | Description | Extent (ha) and proportion of survey area (%) | Representative Images |
|---|---|---|---|
| | **Habitat value**<br>High | | |
| 2 - Cleared areas | **Significant fauna**<br>Nil<br>**Habitat value**<br>Nil | 0.99 ha (19.48%)<br>Site C (0.75 ha)<br>Connection route (0.24 ha) | No photo |
| **Halls Creek** | | | |
| 1 – Open Eucalypt woodland clay plain | Open woodland of *Eucalyptus alba* var. *australasica*, *Corymbia ferruginea* subsp. *stypophylla* and *Lysiphyllum cunninghamii* over open shrubland of *Acacia colei, Ehretia saligna* and *Gossypium australe* on brown loam clay on clay flats and rocky plains with a minor drainage line.<br>**Significant fauna**<br>The Gouldian Finch (EN/P4) was recorded within the drainage line habitat with flowing water, Site C. Highly likely within drainage habitat Subsite C3 and likely to forage within the Connection Route.<br>Grey Falcon (VU) occurs locally, and suitable foraging habitat is present. Likely to occur on at least an occasional basis.<br>There is suitable foraging habitat for the Peregrine Falcon (OS) and is likely to occur at least on an occasional basis.<br>This habitat type is suitable for the Barn Swallow (MI), and it is likely to be present on at least occasional basis during the non-breeding season.<br>The Yellow Wagtail (MI) is likely to occur on at least an occasional basis.<br>The Oriental Pratincole (MI) occurs locally, and is likely to be present on at least a seasonal basis, aerially hawking for insects. | 125.19 ha (64.15%)<br>Site C (22.08 ha)<br>Subsite C3 (84.59 ha)<br>Connection route (18.52 ha) |  |

| Habitat Type | Description | Extent (ha) and proportion of survey area (%) | Representative Images |
|---|---|---|---|
| | Habitat appears suitable for the Northern Short-tailed mouse (P4); sandplain with tussock and hummock grasses and sparse shrubland, on clayey flats.<br>The Yellow-lipped cave bat (P2) was recorded during the survey (Probable record). Would be expected to forage in the survey area.<br>Northern Blue-tongue Skink (CR) is likely to occur due to suitable habitat. The species can occur in a diverse range of habitats, but need adequate shelter in the form of shrubbery, thick grasses or leaf litter.<br>**Habitat value**<br>High | | |
| 2 – Acacia shrubland thicket | Open woodland of *Eucalyptus alba* var. *australasica* and *Corymbia ferruginea* subsp. *stypophylla* over closed shrubland of *Acacia trachycarpa, Acacia colei* and *Grevillea pyramidalis* subsp. *pyramidalis* on red/brown sandy loam on rocky gentle slopes/low rise to minor drainage line.<br>**Significant fauna**<br>The Gouldian Finch (EN/P4) was recorded within the drainage line habitat with flowing water, Site C. Highly likely within drainage habitat Subsite C3 and likely to forage within the Connection Route.<br>The Oriental Pratincole (MI) occurs locally, and is likely to be present on at least a seasonal basis, aerially hawking for insects.<br>Northern Blue-tongue Skink (CR) is likely to occur due to suitable habitat. The species can occur in a diverse range of habitats, but need adequate shelter in the form of shrubbery, thick grasses or leaf litter.<br>**Habitat value**<br>High | 15.19 ha (7.78%)<br>Subsite C3 (15.19 ha) |  |

| Habitat Type | Description | Extent (ha) and proportion of survey area (%) | Representative Images |
|---|---|---|---|
| 3 – Minor drainage line | Open woodland of *Eucalyptus alba* var. *australasica*, *Corymbia ferruginea* subsp. *stypophylla* and *Lysiphyllum cunninghamii* over open shrubland of *Acacia colei*, *Ehretia saligna* and *Gossypium australe* on brown loam clay on clay flats and rocky plains with a minor drainage line.<br>Open woodland of *Eucalyptus victrix* over isolated trees of *Melaleuca bracteata* over isolated shrubs of *Flueggea virosa* subsp. *melanthesoides* and **Leucaena leucocephala* subsp. *leucocephala* on brown gritty sandy loam on a moderate drainage line.<br>This drainage line was recorded with flowing water at the time of the survey, making it an important water source for many fauna species.<br>**Significant fauna**<br>The Gouldian Finch (EN/P4) was recorded within the drainage line habitat with flowing water, Site C. Highly likely within drainage habitat Subsite C3 and likely to forage within the Connection Route.<br>The Oriental Pratincole (MI) occurs locally, and is likely to be present on at least a seasonal basis, aerially hawking for insects.<br>No suitable roost habitat within survey area for the Ghost Bat (VU), however extensive potential roost habitat (rocky breakaway) in the region. Likely to occur (foraging) on at least occasional basis.<br>Habitat appears suitable for the Northern Short-tailed mouse (P4); sandplain with tussock and hummock grasses and sparse shrubland, on clayey flats.<br>The Yellow-lipped cave bat (P2) was recorded during the survey (Probable record). Would be expected to forage in the survey area.<br>Northern Blue-tongue Skink (CR) is likely to occur due to suitable habitat. The species can occur in a diverse range of habitats, but need adequate shelter in the form of shrubbery, thick grasses or leaf litter. This habitat would provide access to water. | 4.16 ha (2.13 %)<br>Site C (1.86 ha)<br>Subsite C3 (2.3 ha) |  |

| Habitat Type | Description | Extent (ha) and proportion of survey area (%) | Representative Images |
|---|---|---|---|
| | The Freshwater Crocodile (OS) is likely to occur in this habitat type, as there are records nearby, and there are numerous drainage networks linkage.<br>There is suitable habitat for the Mitchell's Water Monitor (CR) and it may occur in low numbers on an occasional basis as the survey area is on the outer extent of its range.<br>The Merten's Water Monitor (EN) is likely to occur as there is suitable habitat. It may occur in low numbers on an occasional basis as the survey area is on the outer extent of its range.<br>**Habitat value**<br>High | | |
| 4 – Rocky hills and slopes | Open woodland of *Eucalyptus alba* var. *australasica* and *Corymbia ferruginea* subsp. *stypophylla* over open shrubland of *Acacia colei, Grevillea pyramidalis* subsp. *pyramidalis* and *Acacia ancistrocarpa* on brown sandy loam on rocky low hills and slopes.<br>**Significant fauna**<br>The Gravel Dragon (P1) is likely to occur as the survey area provides suitable stony habitat.<br>No suitable roost habitat within survey area for the Ghost Bat (VU), however extensive potential roost habitat (rocky breakaway) in the region. Likely to occur (foraging) on at least occasional basis.<br>The Yellow-lipped cave bat (P2) was recorded during the survey (Probable record). Would be expected to forage in the survey area, but no caves present in this habitat type that would be suitable for breeding/roosting.<br>**Habitat value**<br>High | 46.48 ha (23.82 %)<br>Site C (18.47 ha)<br>Subsite C3 (23.42 ha)<br>Connection route (4.59 ha) |  |
| 5 – Cleared areas | **Significant fauna**<br>Nil<br>**Habitat value** | 4.12 ha (2.11%) | No photo |

| Habitat Type | Description | Extent (ha) and proportion of survey area (%) | Representative Images |
|---|---|---|---|
| | Nil | Site C (0.88 ha)<br>Subsite C3 (0.61 ha)<br>Connections route (2.63 ha) | |
| **Broome** | | | |
| 1 – Pindan shrubland | Variable from low open forest to open woodland (*Corymbia greeniana*, *C. zygophylla* and/or *C. flavescens*) with *Acacia eriopoda* or *A. eriopoda* x *tumida* var. *tumida* (tree form or occasionally shrub form where more recently burnt) and scattered *Acacia colei* var. *colei* on pindan plains and dunes of very low relief.<br><br>**Significant fauna**<br>Gouldian Finch (EN/P4) is known to occur locally, may forage on seed of grasses when seasonally available within the survey area. The woodland habitat throughout the survey has a paucity of suitable nesting/breeding habitat, however may lack nearby water sources, therefore may be seasonal use only.<br>The Fork-tailed Swift (MI) was recorded in large numbers (150) in this habitat type, flying overhead and foraging aerially.<br>The Grey Falcon (VU) is likely to occur as there are records of species present in the region.<br>The Peregrine Falcon (OS) is known to occur locally, and the pindan shrubland habitat within the study area represents suitable foraging habitat, although lacks suitable breeding habitat.<br>Osprey (MI) has previously been recorded in the nearby area occupying a nest and is therefore likely to occur.<br>Bare-rumped Sheathtail Bat (VU) was recorded with a Definite call reading.<br>Bilby (VU) was recorded active in the survey area. | 908.73 ha (91.90%)<br>Site F (454.85 ha)<br>Site F Connection (16.75 ha)<br>Site G (222.82 ha)<br>Site G-H Connection (20.35 ha)<br>Site H (193.97 ha) |  |

| Habitat Type | Description | Extent (ha) and proportion of survey area (%) | Representative Images |
|---|---|---|---|
| | Northern Brush-tail Possum (VU) was recorded on camera and suitable habitat is present.<br>Habitat appears suitable; sandplain with tussock and hummock grasses and sparse shrubland for the Northern Short-tailed mouse (P4).<br>Suitable habitat is present for the Dampierland Plain Slider (P2) within survey areas, namely low elevation ancient dunes supporting shrubland.<br>Suitable habitat is present for the Dampierland Burrowing Snake (P2) within survey areas, namely low elevation ancient dunes supporting shrubland.<br>Northern Blue-tongue Skink (CR) recorded within all Sites (F,G,H) during the survey.<br>**Habitat value**<br>High | | |
| 2 – Pindan shrubland relict dunes | Pindan on relict dune formation with *Sersalisia sericea.* Low open forest to tall shrubland (Pindan) dominated by *Acacia eriopoda* with emergent *Planchonia careyi*, *Corymbia greeniana* and *C. zygophylla.*<br>**Significant fauna**<br>Gouldian Finch (EN/P4) is known to occur locally, may forage on seed of grasses when seasonally available within the survey area. The woodland habitat throughout the survey has a paucity of suitable nesting/breeding, however may lack nearby water sources, therefore may be seasonal use only.<br>The Fork-tailed Swift (MI) was recorded in large numbers (150) in this habitat type, flying overhead and foraging aerially.<br>Bilby (VU) was recorded active in the survey area.<br>Northern Brush-tail Possum (VU) was recorded on camera and suitable habitat.<br>The Grey Falcon (VU) is likely to occur as there are records of species present in the region.<br>The Peregrine Falcon (OS) is known to occur locally, and the pindan shrubland habitat within the study area | 44.35 ha (4.48%)<br>Site F (44.35 ha) |  |

| Habitat Type | Description | Extent (ha) and proportion of survey area (%) | Representative Images |
|---|---|---|---|
| | represents suitable foraging habitat, although lacks suitable breeding habitat.<br>Osprey (MI) has previously been recorded in the nearby area occupying a nest and is therefore likely to occur.<br>Bare-rumped Sheathtail Bat (VU) was recorded with a Definite call reading.<br>Habitat appears suitable; sandplain with tussock and hummock grasses and sparse shrubland for the Northern Short-tailed mouse (P4).<br>Suitable habitat is present for the Dampierland Plain Slider (P2) within survey areas, namely low elevation ancient dunes supporting shrubland.<br>Suitable habitat is present for the Dampierland Burrowing Snake (P2) within survey areas, namely low elevation ancient dunes supporting shrubland.<br>Northern Blue-tongue Skink (CR) recorded within all Sites (F,G,H) during the survey.<br><br>**Habitat value**<br>High | | |
| 3 – Open Eucalypt dampland | Low open forest of *Eucalyptus tectifica* and **Azadirachta indica* over *Melaleuca cajuputi* subsp. *cajuputi*, *Melaleuca glomerata, Lysiphyllum cunninghamii* and *Acacia colei* var. *colei* over a vineland of **Passiflora foetida* over a tussock grassland *Chrysopogon pallidus, Eragrostis speciosa* over a sparse sedgeland of *Cyperus conicus* over a low open grassland of *Cynodon ?dactylon* on clay dampland.<br><br>**Significant fauna**<br>Gouldian Finch (EN/P4) is known to occur locally, may forage on seed of grasses when seasonally available within the survey area. The woodland habitat throughout the survey has a paucity of suitable nesting/breeding, however may lack nearby water sources, therefore may be seasonal use only.<br>Osprey (MI) has previously been recorded in the nearby area occupying a nest and is therefore likely to occur. | 0.63 ha (0.06%)<br>Site F Connection (0.63 ha) |  |

| Habitat Type | Description | Extent (ha) and proportion of survey area (%) | Representative Images |
|---|---|---|---|
| | Suitable habitat is present for the Dampierland Plain Slider (P2) within survey areas, namely low elevation ancient dunes supporting shrubland.<br>Suitable habitat is present for the Dampierland Burrowing Snake (P2) within survey areas, namely low elevation ancient dunes supporting shrubland.<br>Northern Blue-tongue Skink (CR) is likely to occur due to suitable habitat. The species can occur in a diverse range of habitats, but need adequate shelter in the form of shrubbery, thick grasses or leaf litter.<br>**Habitat value**<br>Medium | | |
| 4 – Sparse mangrove tidal mudflat | Tidal mudflats<br><br>Sparse trees of *Avicennia marina* subsp. *marina* and ?*Ceriops australis* over a sparse low samphire shrubland of *Tecticornia ?pergranulata* subsp. *elongata, Neobassia astrocarpa* and *Sesuvium portulacastrum* subsp. *portulacastrum* on tidal mudflats<br><br>**Significant fauna**<br>Grey Falcon (VU)<br>Peregrine Falcon (OS)<br>Osprey (MI)<br><br>**Habitat value**<br>Low. This habitat area is very small in the survey area, and disturbed. | 0.91 ha (0.09%)<br>Site F Connection (0.91 ha) |  |

| Habitat Type | Description | Extent (ha) and proportion of survey area (%) | Representative Images |
|---|---|---|---|
| 5 - Scattered plantings and native trees | Planted native *Corymbia/Eucalyptus* trees over weeds on maintained road verge<br><br>**Significant fauna**<br>This may provide marginal habitat and movement corridors for the Northern Brush-tail Possum (VU), Northern Blue-tongue Skink (CR), Dampierland Plain Slider (P2) and Dampierland Burrowing Snake (P2).<br>**Habitat value**<br>Low | 4.59 ha (3.28%)<br>Site F Connection (3.94 ha)<br>Site F (0.65 ha) |  |
| 6 - Degraded and cleared areas | Regularly cleared/graded road verges, drains and infrastructure corridors that support regrowth of native forbs and grasses<br><br>**Significant fauna**<br>Nil<br>**Habitat value**<br>Nil | 7.97 ha (0.81%)<br>Site F (3.66 ha), Site F Connection (3.42 ha)<br>Site G H Connection (0.89 ha) |  |

## 7.2.2 Fauna diversity

The fauna diversity recorded for each survey area is presented below. A full species list is provided in Appendix E.

**Camballin**

The Camballin survey identified a total of 25 species, including 20 birds, 2 mammals and 3 reptiles. Of these, one species was introduced, the Donkey (*Equus asinus*).

**Derby**

The Derby survey identified a total of 90 species, including 61 birds, 13 mammals, 14 reptiles, and 2 amphibians. Of these, four are introduced species, including the Black Rat (*Rattus rattus*), Cat (*Felis catus*), Dog (*Canis familiaris*) and Cane Toad (*Rhinella marina*).

The Cane Toad is a Declared Pest (Prohibited) under section 12 of the *BAM Act* 2007.

**Broome**

The Broome survey recorded a total of 115 fauna species during the surveys. This total included 73 birds, 9 mammals, 30 reptiles, and 3 amphibians. Of these species recorded, three are introduced species, which included the Dingo (*Canis familiaris*), recorded on one camera at Site H, and observed at Site G, the Cat (*Felis catus*) and Cattle (*Bos taurus*).

**Halls Creek**

The Halls Creek survey recorded a total of 69 species, including 45 birds, 17 mammals, 6 reptiles and one amphibian. Of these, three are introduced species, the Dingo (*Canis familiaris*), the Cat (*Felis catus*) and the Cane Toad (*Rhinella marina*).

The Cane Toad is a Declared Pest (Prohibited) under section 12 of the *BAM Act* 2007.

## 7.2.3 Significant fauna

**Camballin**

No significant fauna were recorded at Camballin/Looma.

**Derby**

The Derby survey recorded the following four significant fauna species:

– Northern Blue-tongue Skink (*Tiliqua scincoides intermedia*) – Critically Endangered under EPBC Act
– Fork-tailed Swift (*Apus pacificus*) – Migratory species under EPBC and BC Acts
– Oriental Cuckoo (*Cuculus optatus*) – Migratory species under the EPBC and BC Acts.
– Northern Coastal Free-tailed Bat (*Ozimops cobourgianus*) – Priority 1 on the DBCA priority fauna list

**Northern Blue-tongue Skink (*Tiliqua scincoides intermedia*)**

The Northern Blue-tongue Skink was observed at area O in Derby, and tracks of the species were recorded at areas C and P.

**Fork-tailed Swift (*Apus pacificus*)**

The Fork-tailed Swift was observed at area O. One individual was recorded.

**Oriental Cuckoo (*Cuculus optatus*)**

The Oriental Cuckoo was observed at area D.

**Northern Coastal Free-tailed Bat (*Ozimops cobourgianus*)**

The Northern Coastal Free-tailed Bat was recorded across all detectors and all areas at Derby. Table 38 presents this data, where “D” represents Definite (no doubt in call of species).

*Table 38 Records across detector sites for the Northern Coastal Free-tailed Bat – Derby*

| Location | sm4_6_batA | sm4_6_batA | sm4_6_batA | sm4_6_batA | sm4_6_batB | sm4_7_batA | sm4_7_batA | sm4_7_batA | sm4_7_batA |
|---|---|---|---|---|---|---|---|---|---|
| Date | 18/3/24 | 19/3/24 | 20/3/24 | 21/3/24 | 22/3/24 | 18/3/24 | 19/3/24 | 20/3/24 | 21/3/24 |
| Northern Coastal Free-tailed Bat | D | D | D | D | D | D | D | D | D |

The locations of these significant fauna recorded during the survey are presented in Figure 12, Appendix A. The raw data (including field photographs and full remote camera records) for significant fauna are provided in Appendix E.

**Broome**

The Broome survey recorded the following seven significant fauna species:

– Northern Blue-tongue Skink (*Tiliqua scincoides intermedia*) – Critically Endangered under EPBC Act
– Bilby (*Macrotis lagotis*) – Vulnerable under EPBC and BC Acts
– Northern Brushtail Possum (*Trichosurus vulpecula arnhemensis*) - Vulnerable under EPBC and BC Acts
– Bare-rumped Sheath-tailed Bat (*Saccolaimus saccolaimus*) – Vulnerable under EPBC Act and Priority 3 under BC Act
– Fork-tailed Swift (*Apus pacificus*) – Migratory species under EPBC and BC Acts
– Northern Coastal Free-tailed Bat (*Ozimops cobourgianus*) – Priority 1 on the DBCA priority fauna list
– Yellow-lipped Cave Bat (*Vespadelus douglasorum*) – Priority 2 on the DBCA priority fauna list

The location of these significant fauna recorded during the survey are presented in Figure 18, Appendix A.

The raw data (including field photographs and full remote camera records) for significant fauna are provided in Appendix E.

**Northern Blue-tongue Skink (*Tiliqua scincoides intermedia*)**

The Northern Blue-tongue Skink was recorded on camera at Site F two times (camera P5 and W13). The species was also sighted numerous times (Plate 17).



*Plate 17 Northern Blue-tongue Skink in situ at Broome*

A summary of the evidence or individuals recorded opportunistically are provided in Table 39 below. These records are presented on Figure 18, Appendix A.

*Table 39 Evidence of Northern Blue-tongue Skink recorded opportunistically at Broome*

| Site | Record type | Date | Status / comment | Lat | Long |
|---|---|---|---|---|---|
| Site G and H | Sighting | 14/02/2024 | basking then retreated into buttress | -17.90556 | 122.29399 |
| Site F | Sighting | 7/03/2024 | adult on track | -17.85989 | 122.27658 |
| Site F | Prints | 9/03/2024 | tracks | -17.87946 | 122.28002 |
| Site F connection | Sighting | 9/03/2024 | on track | -17.88331 | 122.29354 |
| Site G and H connection | Sighting | 9/03/2024 | active on track | -17.88929 | 122.26535 |

### Bilby (*Macrotis lagotis*)

The Bilby was recorded on two cameras at Site F (Plate 18). A total of 5 individual captures were made (1 individual on camera HF10 and 4 captures on camera P5).




*Plate 18 Bilby recorded on camera digging burrow at Broome Site F*

A total of 31 Bilby burrows were recorded across Sites G and H and F. Bilby burrow information and photographs are provided in Appendix E. Seven (7) of these burrows were recorded as recently active (prints, fresh spoil).

A confirmed Bilby scat was recorded in the survey area (Plate 19). A summary of the evidence (burrows, diggings and scats) recorded for Bilby at Broome is also provided in Appendix E.



*Plate 19* *Bilby scat - Broome*

**Northern Brushtail Possum (*Trichosurus vulpecula arnhemensis*)**

The Northern Brushtail Possum was captured on one camera (Plate 20), a total of two times at Site G (camera P5).




*Plate 20* *Northern Brushtail Possum captured on remote camera - Broome*

A summary of the evidence recorded at Broome suitable for the Northern Brushtail Possum is provided in Table 40.

*Table 40 Evidence of Northern Brushtail Possum recorded at Broome*

| Site | Record type | Date | Status / comment | Lat | Long | Photo |
|---|---|---|---|---|---|---|
| Site G and H | Scat | 14/02/2024 | Scat under sap. Old scats | -17.9121016333333 | 122.29391855 |  |
| Site G and H | Scat | 16/02/2024 | scat under a sap seep | -17.9282119333333 | 122.298268383333 |  |

| Site | Record type | Date | Status / comment | Lat | Long | Photo |
|---|---|---|---|---|---|---|
| | | | | | |  |
| Site G and H | Scat | 17/02/2024 | potential possum scat but bit old | -17.9327338666667 | 122.303335583333 |  |

| Site | Record type | Date | Status / comment | Lat | Long | Photo |
|---|---|---|---|---|---|---|
| Site F | Scratchings | 8/03/2024 | potential possum claw marks on trunk and branches several large Eucalypts in area | -17.8710699333333 | 122.276795816667 |  |
| Site G and H | Scratchings | 6/03/2024 | possible possum scratches on tree trunk below hollow | -17.9253539 | 122.293055083333 |  |

| Site | Record type | Date | Status / comment | Lat | Long | Photo |
|---|---|---|---|---|---|---|
| Site F connection | Individual (dead) | 16/02/2024 | Northern Brushtail Possum dead | -17.8928337833333 | 122.261568416667 |  |

The survey recorded any suitable habitat trees for the Northern Brushtail Possum, and commented on any hollows present, and their status that might be suitable for the species use. A total of 694 trees were recorded suitable for the Northern Brushtail Possum across the Broome sites. Of these habitat trees, a total of 328 trees contained hollows suitable or potentially suitable for use. This data is presented in a table in Appendix E.

**Fork-tailed Swift (*Apus pacificus*)**

A group of approximately 150 Fork-tailed Swifts were recorded foraging at approximately 50- 500 m high at Site F.

**Northern Coastal Free-tailed Bat (*Ozimops cobourgianus*)**

The Northern Coastal Free-tailed Bat was recorded across all Sites (F, G and H) and at each detector location. The highest number of calls recorded was at Site G (north) of 60, for the Northern Coastal Free-tailed Bat. A summary of the calls per site is provided in Table 41 below. A total of 270 records of the Northern Coastal Free-tailed Bat was recorded at all sites.

**Bare-rumped Sheath-tailed Bat (*Saccolaimus saccolaimus*)**

The Bare-rumped Sheath-tailed Bat was recorded at Sites F (south), in one location at Site G (south) and in one location at Site H. A total of 9 records of the species was recorded. The highest number of records (6) was at Site F (south) (Table 41).

**Yellow-lipped Cave Bat (*Vespadelus douglasorum*)**

The Yellow-lipped Cave Bat was recorded at one location in Site G (north) and at both locations of Site G (south). A total of 43 records were taken for the species. The highest number of calls recorded was 30, at Site G (south) (Table 41).

*Table 41 Significant bat species recorded per site - Broome*

| Location | Site F north | Site F north | Site F central | Site F south | Site G north | Site G north | Site F south | Site G south | Site G south | Site H | Site H | **Total per species** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bat species (and number of recorded calls) | | | | | | | | | | | | |
| Northern Coastal Free-tailed Bat | 4 | 1 | 1 | 22 | 60 | 41 | 41 | 29 | 23 | 39 | 9 | **270** |
| Bare-rumped Sheath-tailed Bat | | | | 6 | | | | 1 | | | 2 | **9** |
| Yellow-lipped Cave Bat | | | | | | 2 | | 30 | 11 | | | **43** |
| **Total per site** | **4** | **1** | **1** | **28** | **60** | **43** | **41** | **60** | **34** | **39** | **11** | |
| **Grand total** | | | | | | | | | | | | **322** |

The bat records and site details (coordinates/dates) are provided in Appendix E.

**Halls Creek**

The Halls Creek survey recorded the following three significant fauna species:

– Gouldian Finch (*Chloebia gouldiae*) – Endangered under the EPBC Act and P4 on the DBCA priority fauna list
– Northern Coastal Free-tailed Bat (*Ozimops cobourgianus*) – Priority 1 on the DBCA priority fauna list
– Yellow-lipped Cave Bat (*Vespadelus douglasorum*) – Priority 2 on the DBCA priority fauna list.

**Gouldian Finch (*Chloebia gouldiae*)**

The Gouldian Finch was observed at area C in Halls Creek. One individual was recorded within the drainage line habitat.

**Northern Coastal Free-tailed Bat (*Ozimops cobourgianus*) and Yellow-lipped Cave Bat (*Vespadelus douglasorum*)**

The Northern Coastal Free-tailed Bat and Yellow-lipped Cave Bat were both recorded at both areas C3 and C in Halls Creek. Table 42 below presents the locations that the species were detected across the recorders. The confidence rating for Northern- Coastal Free-tailed Bat is Definite (D), whilst for the Yellow-lipped Cave Bat is Probable (PR).

*Table 42 Records across detector sites for significant bat species – Halls Creek*

| Location | sm4_6_Halls Creek | sm4_6_Halls Creek | sm4_6_Halls Creek | sm4_7_Halls Creek | sm4_7_Halls Creek | sm4_7_Halls Creek |
|---|---|---|---|---|---|---|
| Date | 23/04/24 | 24/04/24 | 25/04/24 | 23/04/24 | 24/04/24 | 25/04/24 |
| Northern Coastal Free-tailed Bat | D | D | D | D | D | D |
| Yellow-lipped Cave Bat | PR | PR | - | - | PR | - |

The location of these significant fauna recorded during the survey are presented in Figure 24, Appendix A.

The raw data (including field photographs and full remote camera records) for significant fauna are provided in Appendix E.

### *Likelihood of occurrence assessment*

In addition to the field survey results, an assessment of the likelihood of significant species occurring in the survey area was undertaken. This assessment is based on species' biology, habitat requirements, the quality and availability of suitable habitat as determined during the field survey and records of the species in the survey area and locality. Based on the above database searches and GHD observations, 25 significant terrestrial vertebrate taxa were identified as likely to occur or are known to occur based on survey records (Table 43).

*Table 43 Summary of likelihood of occurrence assessment for significant fauna*

| Species | EPBC Act | BC Act/ DBCA | Assessment outcome (post-survey) |
|---|---|---|---|
| **Birds** | | | |
| *Apus pacificus* (Fork-tailed Swift) | MI | MI | **Derby**: Known, recorded at area O. Likely to occur over all sites on at least an occasional or seasonal basis.<br>**Camballin**: Likely - known to occur locally during seasonal non-breeding visitation, Likely to occur at least on occasional basis foraging aerially over the survey area.<br>**Broome**: Known, recorded in large numbers (150 birds) at Site F. |
| *Cuculus optatus* (Oriental Cuckoo) | MI | MI | **Derby**: Known, recorded at area D. Likely to occur over all sites on at least an occasional or seasonal basis. |
| *Chleobia gouldiae* (Gouldian Finch) | EN | P4 | **Derby**: Likely - local records and suitable foraging habitat. Therefore, likely to visit survey areas on frequent or seasonal basis.<br>**Camballin**: Likely - habitat assessed as suitable for foraging and likely to occur on at least occasional basis.<br>**Halls Creek**: Known – recorded within drainage line habitat with flowing water at Site C. Highly likely within drainage habitat Subsite C3 and Likely to forage within Connection Route.<br>**Broome**: Likely – Known to occur locally, may forage on seed of grasses when seasonally available within the survey area. The woodland habitat throughout the survey has a paucity of suitable nesting/breeding, however may lack nearby water sources, therefore may be seasonal use only. |
| *Falco hypoleucos* (Grey Falcon) | VU | VU | **Derby**: Likely – local and regional occurrence and suitable foraging habitat. Therefore, likely to visit survey areas on at least occasional basis.<br>**Camballin**: Likely - habitat assessed as suitable for foraging and likely to occur on at least occasional basis.<br>**Halls Creek**: Likely – occurs locally, and suitable foraging habitat present. Likely to occur on at least occasional; basis.<br>**Broome**: Likely – Records of species present in the region, although not commonly observed. |
| *Falco peregrinus* (Peregrine Falcon) | OS | OS | **Derby**: Likely – local and regional occurrence and suitable foraging habitat. Therefore, likely to visit survey areas on at least occasional basis.<br>**Camballin**: Likely - habitat assessed as suitable for foraging and likely to occur on at least occasional basis.<br>**Halls Creek**: Likely – suitable foraging habitat occurs within the survey area sites. Likely to occur at least on occasional basis.<br>**Broome**: Likely – Known to occur locally, and the pindan shrubland habitat within the study area represents suitable foraging habitat, although lacks suitable breeding habitat. |
| *Hirundo rustica* (Barn Swallow) | MI | MI | **Derby**: Likely - Occurs locally and habitat suitable. Likely to be present on at least occasional basis during non-breeding season.<br>**Camballin**: Likely - habitat assessed as suitable for foraging and likely to occur on at least occasional basis.<br>**Halls Creek**: Likely - habitat suitable. Likely to be present on at least occasional basis during non-breeding season. |
| *Motacilla flava* (Yellow Wagtail) | MI | MI | **Derby**: Likely – occurs locally and wider region based on database records. Expected to occur at least on occasional basis. |

| Species | EPBC Act | BC Act/ DBCA | Assessment outcome (post-survey) |
|---|---|---|---|
| | | | **Halls Creek**: Likely – species is likely to occur on at least an occasional seasonal basis. |
| *Polytelis alexandrae* (Princess Parrot) | VU | VU | **Camballin**: Likely – habitat within survey area is suitable, likely to occur on at lease occasional basis. |
| *Glareola maldivarum* (Oriental Pratincole) | MI | MI | **Halls Creek:** Likely – occurs locally and expected to occur aerially over the survey hawking for insects, at least on an occasional or seasonal basis. |
| *Pandion haliaetus* (Osprey) | MI | MI | **Broome**: Likely – species has previously been recorded in the nearby area occupying a nest. |
| **Mammals** | | | |
| *Ozimops cobourgianus* (Northern Coastal Free-tailed Bat) | - | P1 | **Derby**: Known – Recorded during the field survey via call recordings on all survey sites. Likely to roost in tree hollows on all sites. |
| *Saccolaimus saccolaimus nudicluniatus* (Bare-rumped Sheathtail Bat) | VU | VU | **Broome**: Known – Recorded on bat-call device with a definite call reading. |
| *Macroderma gigas* (Ghost bat) | VU | VU | **Camballin**: Likely – no suitable roost habitat within survey area, however extensive potential roost habitat (rocky breakaway) in proximity to survey area. Likely to occur (foraging) on at least occasional basis.<br>**Halls Creek**: Likely – no suitable roost habitat within survey area, however extensive potential roost habitat (rocky breakaway) in region. Likely to occur (foraging) on at least occasional basis. |
| *Macrotis lagotis* (Bilby) | VU | VU | **Camballin**: Likely – to occur on at least an occasional basis based on potentially suitable foraging habitat present.<br>**Broome**: Known - This species is known to occur locally and was recorded during the field survey. |
| *Trichosurus vulpecula arnhemensis* (Northern Brush-tailed Possum) | VU | VU | **Derby**: Likely – potentially suitable habitat, namely moderately closed canopy cover found on survey area Sites O, C, D and I.<br>**Broome**: Known – recorded on camera at Site G. |
| *Leggadina lakedownensis* (Northern Short-tailed mouse) | - | P4 | **Camballin**: Likely – habitat appears suitable: sandplain with tussock and hummock grasses and sparse shrubland.<br>**Broome**: Likely - habitat appears suitable: sandplain with tussock and hummock grasses and sparse shrubland.<br>**Halls Creek**: Likely - habitat appears suitable: sandplain with tussock and hummock grasses and sparse shrubland. |
| *Petrogale lateralis kimberleyensis* (West Kimberley Rock-Wallaby) | EN | EN | **Camballin**: Likely – to occur on at least an occasional basis based on potentially suitable rocky habitat in proximity and foraging habitat. |
| *Vespadelus douglasorum* (Yellow-lipped cave bat) | - | P2 | **Camballin**: Likely – extensive rocky breakaway (possible roost habitat) located in close proximity of survey area, therefore likely to roost nearby and forage within survey area.<br>**Halls Creek**: Known – recorded on device, as Probable record. |
| **Reptiles** | | | |
| *Lerista separanda* (Dampierland Plain Slider) | - | P2 | **Broome**: Likely - Suitable habitat is present for the species within survey areas, namely low elevation ancient dunes supporting shrubland. |
| *Simoselaps minimus* (Dampierland Burrowing Snake) | - | P2 | **Broome**: Likely – Habitat within survey areas is suitable, namely low elevation ancient dunes supporting shrubland. |
| *Tiliqua scincoides intermedia* (Northern Blue-tongue Skink) | CR | - | **Derby**: Known – recorded at Sites P, C & O. Confirmed via sighting and tracks. Highly likely to occur on remaining Sites D and I.<br>**Camballin**: Likely –suitable habitat.<br>**Broome**: Known - recorded within all Sites (F,G,H) during the survey. |

| Species | EPBC Act | BC Act/ DBCA | Assessment outcome (post-survey) |
|---|---|---|---|
| | | | **Hals Creek**: Likely – suitable habitat for the species. |
| *Crocodylus johnstoni* (Freshwater Crocodile) | - | OS | **Halls Creek**: Likely – suitable habitat and records nearby. |
| *Cryptagama aurita* (Gravel dragon) | - | P1 | **Halls Creek:** Likely – suitable habitat. |
| *Varanus mitchelli* (Mitchell's Water Monitor) | CR | - | **Halls Creek:** Likely – there is suitable habitat (drainage line) and may occur in low numbers on an occasional basis as the survey area is on the outer extent of its range. |
| *Varanus mertensi* (Merten's Water Monitor) | EN | - | **Halls Creek:** Likely – there is suitable habitat (drainage line) and may occur in low numbers on an occasional basis as the survey area is on the outer extent of its range. |

**Legend:**

OS= Other specially protected

CR = Critically endangered under the EPBC Act or BC Act

EN = Endangered under the EPBC Act or BC Act

VU = Vulnerable under the EPBC Act or BC Act

MI = Migratory under EPBC Act with or without International agreement

P1 = Priority 1 under DBCA, poorly known species

P2 = Priority 2 under DBCA, poorly known species

P3 = Priority 3 under DBCA, poorly known species

P4 = Priority 4 under DBCA, rare, near threatened and other species in need of monitoring

# 8 Conclusion

## 8.1 Vegetation

**Camballin/Looma**

One vegetation type was recorded within the Camballin/Looma survey area: *Corymbia zygophylla* open woodland on sandplain (VT01).

No TECs listed under the EPBC Act or BC Act or PECs listed by DBCA were identified within the Camballin/Looma survey area.

The majority of vegetation within the Camballin/Looma survey area was in Excellent condition, with limited signs of disturbance.

**Derby**

Three vegetation types were recorded within the Derby survey area, including an open woodland of *Corymbia dichromophloia, Adansonia gregorii* and *Lysiphyllum cunninghamii* on sandplains (VT02), open woodland of *Adansonia gregorii, C. zygophylla* and *C. opaca* on seasonal drainage flats (VT03) and open woodland of *Adansonia gregorii, C. dichromophloia* and *C. zygophylla* (VT04) on sandy loam plains.

No TECs listed under the EPBC Act or BC Act or PECs listed by DBCA were identified within the Derby survey area.

Vegetation of the Derby survey ranged in condition from Very Good to Completely Degraded. The majority of the survey area was in Very Good (514.55 ha/78.47%) condition.

**Broome**

Four vegetation types were recorded within the Broome survey area, this included:

– Pindan on plains and dunes of low relief (variable from low open forest to open woodland *Corymbia greeniana, C. zygophylla* and/or *C. flavescens* with *Acacia eriopoda* or *A. eriopoda* x *tumida* var. *tumida* over mixed low trees) (VT05),
– Pindan on relict dune formations with *Sersalisia sericea* (low open forest to tall shrubland dominated by *A. eriopoda* with emergent *Planchonia careyi, C. greeniana* and *C. zygophylla*) (VT06),
– A clay dampland of *Eucalyptus tectifica* and **Azadiracta indica* over *Melaleuca cajuputi* subsp. *cajuputi, M glomerata* and *Lysiphyllum cunninghamii* (VT07) and
– tidal mudflats with sparse low trees of Avicennia marina subsp. marina and ?Ceriops australis over a sparse low samphire shrubland (VT08).

Areas of scattered native trees/shrubs over weedy understorey, landscaped areas, regularly cleared/graded verges and drains that support regrowth of native forbs and grasses and rehabilitation were also mapped within the Broome survey area. A total of 7.97 (0.81%) was completely cleared.

No TECs listed under the EPBC Act or BC Act were recorded within the Broome survey area. One PEC was recorded: relict dune system dominated by extensive stands of Minyiiuru (Mangarr – *Sersalisia sericea*) P1 PEC across 44.35 ha in Site F.

Vegetation in the Broome survey area ranged in condition from Excellent (large, continuous tracts of Pindan vegetation) to Completely Degraded (cleared roadsides with regrowth of native forbs and grasses). The majority of the survey area was in Excellent condition (923.80 ha / 93.42%).

**Halls Creek**

Four vegetation types were recorded within the Halls Creek survey area including an open woodland of *Eucalyptus alba* var. *australasica* and *Corymbia ferruginea* subsp. *stypophylla* over closed shrubland on rocky gentle slope/low rise to minor drainage line (VT09), an open woodland of *E. alba* var. *australasica* and *C. ferruginea*

subsp. *stypophylla* over open shrubland on rocky low hills and slopes (VT10), open woodland of *E. alba* var. *australasica*, *C. ferruginea* subsp. *stypophylla* and *Lysiphyllum cunninghamii* over open shrubland on brown loam clay on clay flats and rocky plains with a minor drainage line (VT11) and open woodland of *Eucalyptus victrix* over isolated trees of *Melaleuca bracteata* on a moderate drainage (VT12).

No TECs listed under the EPBC Act or BC Act were recorded within the Halls Creek survey area. One PEC was recorded across all sites: the Kimberley Vegetation Association No. 834 (P3 PEC).

Vegetation condition of the Halls Creek survey areas ranged from Excellent to Degraded, with some areas completely cleared. The majority of the survey area was in Excellent condition (125.5 ha / 64.58%).

# 8.2 Flora

**Camballin/Looma**

A total of 46 vascular flora species from 25 families and 40 genera were recorded within the Camballin/Looma survey area. This total included 96% native species.

No EPBC Act or State-listed Threatened flora were recorded within the survey area. One Priority flora species was tentatively recorded:

– *Polymeria* ?sp. Broome (K.F. Kenneally 9759) (P3).

Two introduced flora taxa were recorded from the Camballin/Looma survey area, accounting for 4% of the total flora species recorded. No declared pests under the BAM act were recorded within the survey area.

**Derby**

A total of 136 vascular flora species from 39 families and 91 genera were recorded within the Derby survey area. This total included 93% native species.

No EPBC Act or State-listed Threatened flora were recorded within the survey area. One Priority flora species was recorded: *Haemodorum capitatum* (P1).

Ten introduced flora species were recorded within the Derby survey area representing 7% of the total flora species recorded. Two declared pest plants listed under the BAM Act were recorded:

– **Azadirachta indica* (Neem). Recorded from all Derby sites.
– **Jatropha gossypiifolia* (Bellyache Bush, Cotton-leaf Physic Nut) This species is also listed as a Weed of National Significance (WONS). Recorded from Site C.

**Broome**

A total of 174 vascular flora species from 48 families and 118 genera (including subspecies and variants) were recorded within the Broome survey area. This total included 160 native species (92%).

No EPBC Act or State-listed Threatened flora were recorded within the survey area. Seven Priority flora species were recorded including:

– *Bonamia oblongifolia* (P3) (Site G, F and H)
– *Acacia monticola x tumida* var. *kulparn* (P3) (Site H)
– *Glycine pindanica* (P3) (Site F Connection and F)
– *Jacquemontia* sp. Broome (A.A. Mitchell 3028) (P1) (Site F, G, and F Connection)
– *Polymeria* sp. Broome (K.F. Kenneally 9759) (P3) (all sites)
– *Terminalia kumpaja* (P3) (Site F and H)
– *Corymbia* ? *paractia* (P1) (Site F Connection)

Three species recorded within the survey represent range extensions from the species currently known range. These taxa include:

– *Neptunia ?major* (south-western most record, not previously recorded from the Dampier Peninsula)

– *Gyrocarpus americanus* subsp. *americanus* (south-westernmost record, not previously recorded from the Dampier Peninsula)
– *Melaleuca ?glomerata* (not previously recorded from the Dampier Peninsula).

Fourteen introduced flora species were recorded within the survey area, accounting for 7% of the species recorded. One species listed as a declared pest plant in WA under the BAM Act was recorded. **Azadirachta indica* (Neem) was recorded from disturbed areas surrounding cattle yards in Area H and is well established in roadside vegetation along Broome Road (Site F Connection).

**Halls Creek**

A total of 135 vascular flora species from 39 families and 93 genera were recorded within the Halls Creek survey area. This total included 93% native species.

No EPBC Act or State-listed Threatened flora were recorded within the survey area. One Priority flora species was recorded:

– *Goodenia crenata* (P3) (Subsite C3).

A total of nine introduced flora species were recorded within the survey area representing 7% of total flora recorded. One declared pest listed under the BAM Act was recorded: **Azadirachta indica* (Neem) was recorded from Site C only.

# 8.3 Fauna

**Camballin/Looma**

The Camballin/Looma site consisted of one fauna habitat type, Mixed tall open shrubland on plains (4.65 ha/ 70.14%). This habitat was open and contained sparse *Corymbia*, and mixed *Acacia* and *Grevillea* species over Triodia and other tussock grasses and forbs.

No significant fauna were recorded at Camballin. However, several species are likely to occur in the area. The Bilby (VU), Gouldian Finch (EN/P4), Grey Falcon (VU), Peregrine Falcon (OS), Barn Swallow (MI) and Princess Parrot (VU) are all likely to occur as the habitat is assessed as suitable for foraging and they could occur at least on an occasional basis.

The Fork-tailed Swift (MI) is likely to occur across the site during the seasonal non-breeding period. The Fork-tailed Swift forages aerially over habitat, rarely landing.

There is no suitable roost habitat for the Ghost Bat (VU) within the survey area, however there is extensive potential roost habitat (rocky breakaway) in proximity to survey area, and therefore likely to support species foraging, at least on an occasional basis.

The habitat appears suitable for the Northern Short-tailed mouse (P4), in the form of sandplain with tussock and hummock grasses, and sparse shrubland on clayey soil.

There is suitable rocky habitat in proximity of the survey area for the West Kimberley Rock Wallaby (EN), and therefore may use the survey area for foraging.

Northern Blue-tongue Skink (CR) is likely to occur due to suitable habitat. The species can occur in a diverse range of habitats, but need adequate shelter in the form of shrubbery, thick grasses or leaf litter.

Yellow-lipped cave bat (P2) is likely to roost nearby and forage within survey area as there is extensive rocky breakaway (possible roost habitat) located in close proximity of the survey area.

**Derby**

The Derby site consists of three fauna habitat types; 1. Mixed tall closed woodland on sandplain (165.75 ha/ 25.28%), 2. Mixed tall open shrubland on seasonal drainage flats (172.31 ha/ 26.28%) and 3. Open Eucalypt woodland (232.88 ha/ 35.52%). The habitats contain tall *Corymbia* and *Adansonia* (boab) trees, and *Hakea*, *Melaleuca* and *Acacia* shrubs over *Triodia* and herbs. The substrates of the habitat types contain sandy-loam soils and seasonal drainage flats.

Four significant fauna species were recorded at Derby; Northern Blue-tongue Skink (CR), Northern Coastal Free-tailed Bat (P1), Fork-tailed Swift (MI), and Oriental Cuckoo (MI). The Fork-tailed Swift and Oriental Cuckoo are expected to utilise the habitats of the Derby site primarily for foraging, as no breeding habitat is present. The Northern Blue-tongue and Northern Coastal Free-tail Bat are expected to be resident in the area as there is suitable foraging and breeding habitat. The Northern Coastal Free-tail Bat can utilise tree hollows in *Corymbia* for breeding present in all habitat types. The Northern Blue-tongue can occupy a diverse range of habitats and will likely be utilise all habitat types in the survey area.

Significant species considered likely to occur at Derby include the Gouldian Finch (EN/P4), Grey Falcon (VU), Peregrine Falcon (OS), Barn Swallow (MI), Yellow Wagtail (MI), and the Northern Brush-tail Possum (VU). This is due to the presence of foraging habitat; open woodland and dominant grasses/herbs and the potential presence of seasonal water availability in the Mixed tall open shrubland. The Northern Brush-tail Possum could potentially utilise the habitats for breeding, as there are large hollow-bearing trees that were recorded during the survey.

**Broome**

The Broome survey recorded 4 major habitat types including 1. Pindan shrubland plain (908.73 ha/ 91.90%), 2. Pindan shrubland on relict dunes (44.35 ha/ 4.48%), 3. Open Eucalypt dampland (0.63 ha/ 0.06%) and 4. Sparse mangrove tidal mudflat (0.91 ha/ 0.09%). The Pindan shrublands support all significant fauna likely to occur in the survey area. The habitat was recorded in varying condition, with some areas long-unburnt and other areas with a sparser understorey. The *Corymbia* in the Pindan shrubland plain habitat provide significant habitat trees (*Corymbia, Eucalyptus*, and Boab) for breeding.

The Broome survey identified seven significant fauna species including the Fork-tailed Swift (MI), Northern Blue-tongue Skink (CR), Bilby (VU), Northern Brushtail Possum (VU), Bare-rumped Sheath-tailed Bat (VU), Northern Coastal Free-tailed Bat (P1) and Yellow-lipped Cave Bat (P2).

A total of 31 Bilby burrows were recorded in the Broome site, with 7 of these recorded as recently active.

A total of 694 habitat trees were recorded in the survey area, which included approximately 328 that contained hollows suitable for the Northern Brush-tail Possum.

The Gouldian Finch (EN/P4) is likely to occur locally as it may forage on seed of grasses when seasonally available. The woodland habitat throughout the survey has a paucity of suitable nesting/breeding, however may lack nearby water sources, therefore may be seasonal use only.

The Grey Falcon (VU) may occur as there are records in the region. The Peregrine Falcon (OS) is known to occur locally, and the pindan shrubland habitat within the study area represents suitable foraging habitat, although lacks suitable breeding habitat. The Osprey (MI) may occur as it has been recorded in the nearby area previously, occupying a nest, however it would likely only be flying over the site and accessing foraging sites nearby. There are no major water sources or wetlands available in the survey area for this species to forage within. They may nest within tall trees in the survey area or artificial platforms (satellite towers).

The habitat appears suitable for the Northern Short-tailed mouse (P4), in the form of sandplain with tussock and hummock grasses, and sparse shrubland on clayey soil.

The Pindan shrubland on relict dunes habitat provides suitable habitat for both the Dampierland Plain Slider (P2) and the Dampierland Burrowing Snake (P2).

**Halls Creek**

The Halls Creek site consists of four habitat types; 1. Open Eucalypt woodland clay plain (125.19 ha/ 64.15%), 2. Acacia shrubland thicket (15.19 ha/ 7.78%), 3. Minor drainage line (4.16 ha/ 2.13%), 4. Rocky hills and slopes (46.48 ha/ 23.82%). The habitats each contain tall *Eucalyptus* and *Corymbia* habitat trees. The minor drainage lines in the survey area contained flowing water in some areas and is a very important water source for many local species and birds that rely on seasonally available water.

A total of three significant fauna species were recorded at Halls Creek; Gouldian Finch (EN/P4), Northern-Coastal Free-tailed Bat (P1), and Yellow-lipped Cave Bat (P2). The Gouldian Finch would likely utilise all habitat types in the survey area apart from the Rocky hills and slopes. The Yellow-lipped cave-bat would utilise the Rocky hills and slopes habitat and would forage in the Open Eucalypt woodland and minor drainage lines of the survey area. There were no caves recorded in the survey area, and therefore the habitats are not suitable for breeding for the

Yellow-lipped cave-bat. The Northern Blue-tongue can occupy a diverse range of habitats and will likely be utilise most habitat types in the survey area, however the Rocky hills and slopes does not provide enough sheltering vegetation, so would be less likely to utilise that habitat type.

The Grey Falcon (VU), Peregrine Falcon (OS), Barn Swallow (MI), Yellow Wagtail (MI), and Oriental Pratincole (MI) are all likely to occur on an occasional or seasonal basis when foraging plants (grasses) are present, and when water is available. Migratory birds are constantly moving from resource to resource and are not likely to rely on the habitats solely in the survey area but may return on a seasonal basis if conditions are good. The survey area is not known to support large numbers of migratory birds, probably as it is inland and the drainage areas are minor.

The Ghost Bat (VU) is likely to occur in the region due to extensive rocky breakaway present. There is no suitable roost habitat in the survey area, as the rocky hills are not cave-bearing. It is likely to forage at least on an occasional basis within the survey area.

The Gravel dragon (P1) is likely to occur in the Rocky hills and slopes habitat type. There are existing records nearby from the DBCA.

The Northern Short-tailed mouse is likely to occur as habitat is suitable. The species occurs on sandplains with tussock and hummock grasses or within sparse shrublands on clayey flats, or cracking clay.

The drainage lines of the survey area are likely to provide a water source and suitable habitat for the Northern Blue-tongue Skink (CR), Freshwater Crocodile (OS), Mitchell’s Water Monitor (CR), and Merten’s Water Monitor (EN). There are numerous drainage networks across the region that would support movement of these species within the landscape, after heavy rainfall events.

# 9 References


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# Appendices

# Appendix A

## Figures


*Figure 1* *Location -Camballin/Looma*

*Figure 2* *Environmental constraints – Camballin/Looma*

*Figure 3* *Survey effort – Camballin/Looma*

*Figure 4* *Vegetation types and significant flora – Camballin/Looma*

*Figure 5* *Vegetation condition – Camballin/Looma*

*Figure 6* *Fauna habitat – Camballin/Looma*

*Figure 7* *Location – Derby*

*Figure 8* *Environmental constraints – Derby*

*Figure 9* *Survey effort – Derby*

*Figure 10* *Vegetation types, significant flora and local trees – Derby*

*Figure 11* *Vegetation condition – Derby*

*Figure 12* *Fauna habitat and significant fauna – Derby*

*Figure 13* *Location – Broome*

*Figure 14* *Environmental constraints – Broome*

*Figure 15* *Survey effort – Broome*

*Figure 16* *Vegetation types and significant flora and communities – Broome*

*Figure 17* *Vegetation condition – Broome*

*Figure 18* *Fauna habitat and significant fauna – Broome*

*Figure 19* *Location - Halls Creek*

*Figure 20* *Environmental constraints – Halls Creek*

*Figure 21* *Survey effort – Halls Creek*

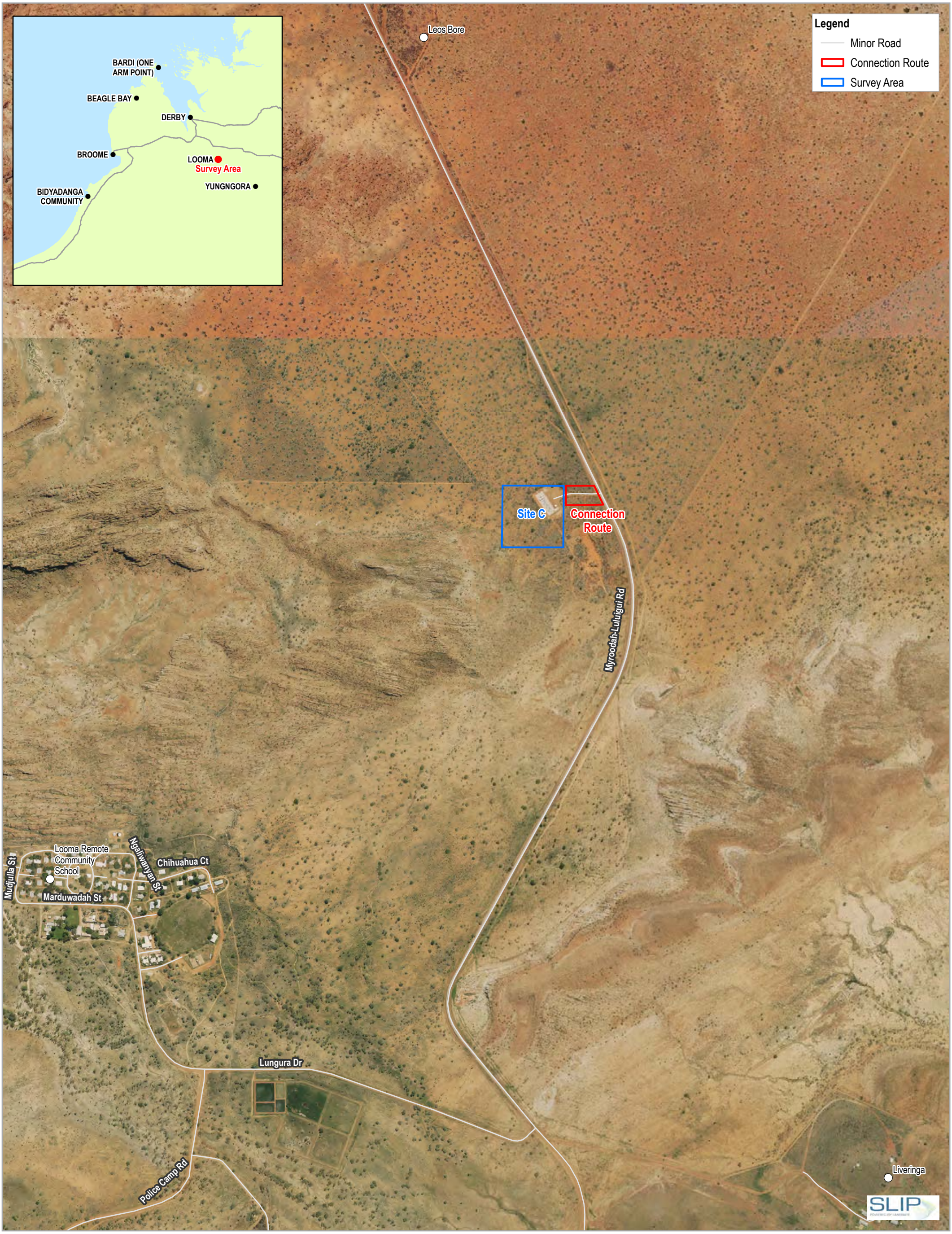
*Figure 22* *Vegetation types and significant flora and communities – Halls Creek*

*Figure 23* *Vegetation condition – Halls Creek*

*Figure 24* *Fauna habitat and significant fauna – Halls Creek*



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Paper Size ISO A3
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0 100 200 300 400

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

**Location - Camballin/Looma**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**

**FIGURE 1**

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**Legend**

- Main Road
- Minor Road
- Environmentally Sensitive Areas
- Connection Route
- Survey Area
- Survey area (20km Buffer)

**Hydrography**

- Mainstream
- Minor River
- Significant Stream
- Major Trib
- Minor Trib
- Inundation Area

**Threatened and Priority Flora - Conservation Status**

- Priority 1
- Priority 3

**Fauna Conservation Categories**

- Critically endangered species
- Endangered species
- Vulnerable species
- Species otherwise in need of special protection (other specially protected)
- Migratory species
- Migratory species & Priority 3
- Priority 1
- Priority 2
- Priority 3
- Priority 4

**Threatened and Priority Ecological Communities**

- Priority 3

Site C
Connection Route
Camballin Rd
Mount Anderson Rd
Jarran Creek
Blina Creek
Uralla Creek
M1 Channel
M2 Channel
Six Mile Creek
17 Mile Dam
Myroodah-Luluigui Rd
Fitzroy River
Luluigui Rd
Nerrima Rd
Nerrima Creek
SLIP

Paper Size ISO A3
at Scale: 1:150,000

0 1.5 3 4.5 6
Kilometers

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

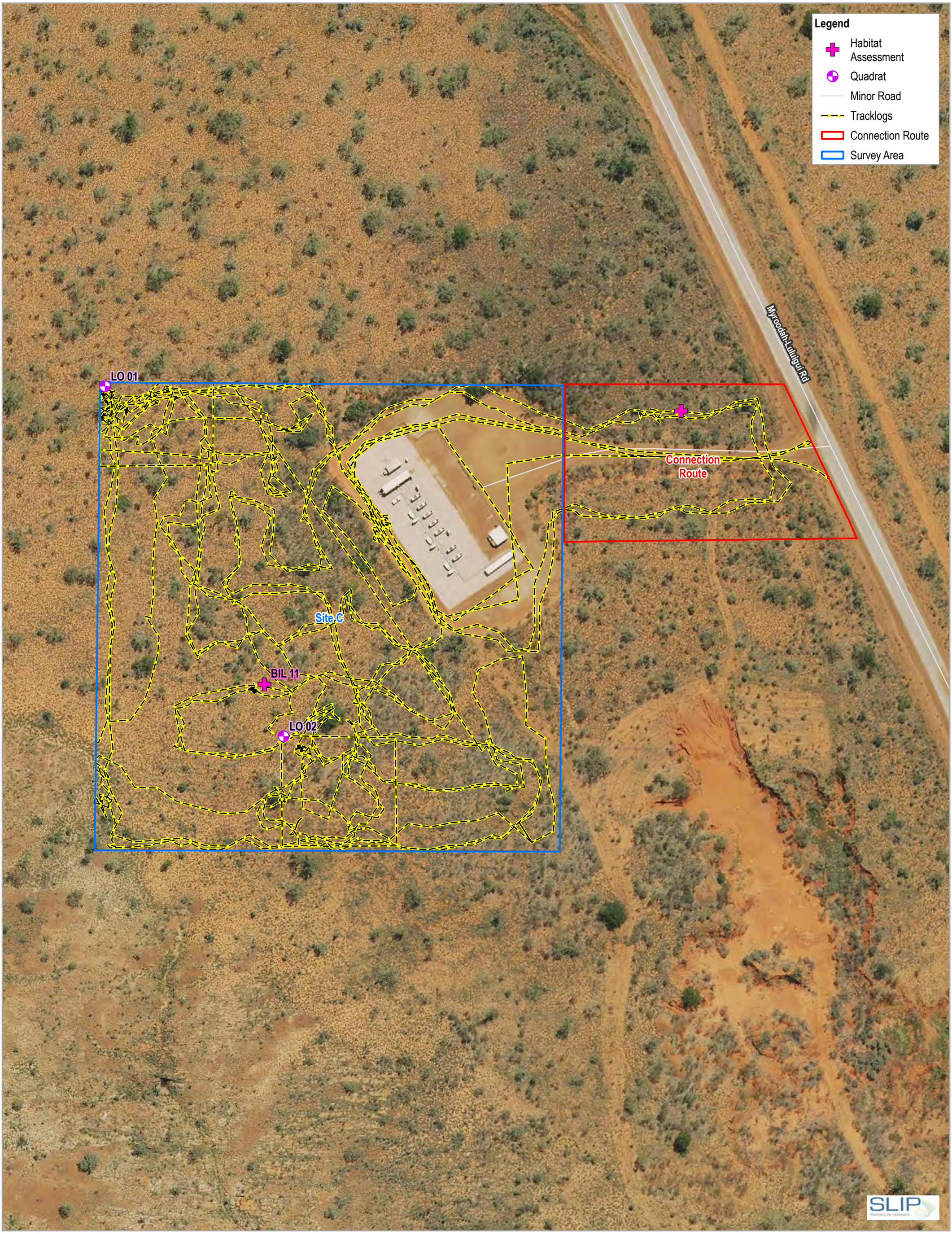
**Environmental Constraints - Camballin/Looma**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**

**FIGURE 2**

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Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

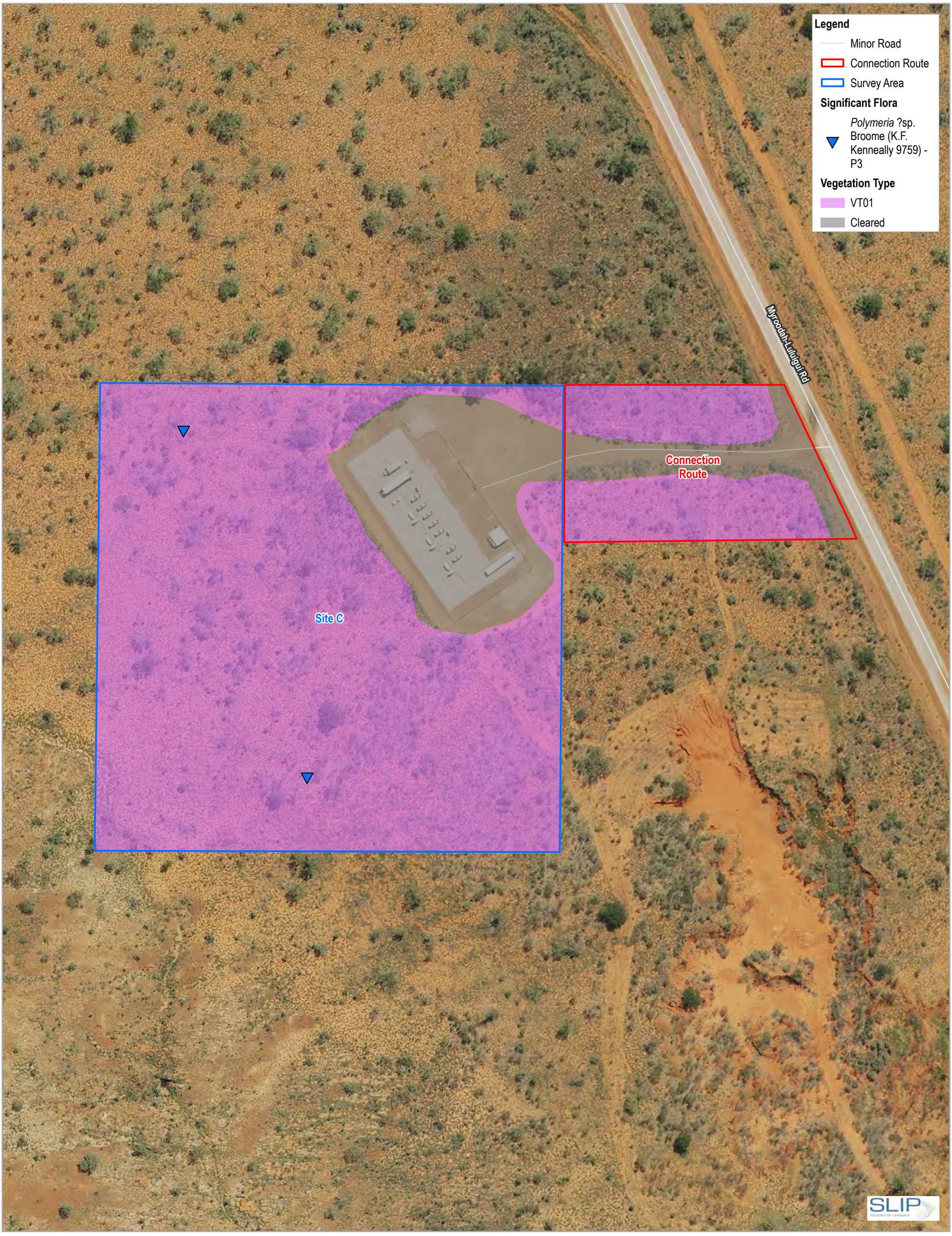
**Survey Effort - Camballin/Looma**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**

**FIGURE 3**

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N

**Horizon Power**
**Kimberley Biological Survey**

## Vegetation Types and Significant Flora - Camballin/Looma

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**

**FIGURE 4**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_004_VegTypes&SigFlora_Camballin_Rev0
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GHD

**Horizon Power**
**Kimberley Biological Survey**

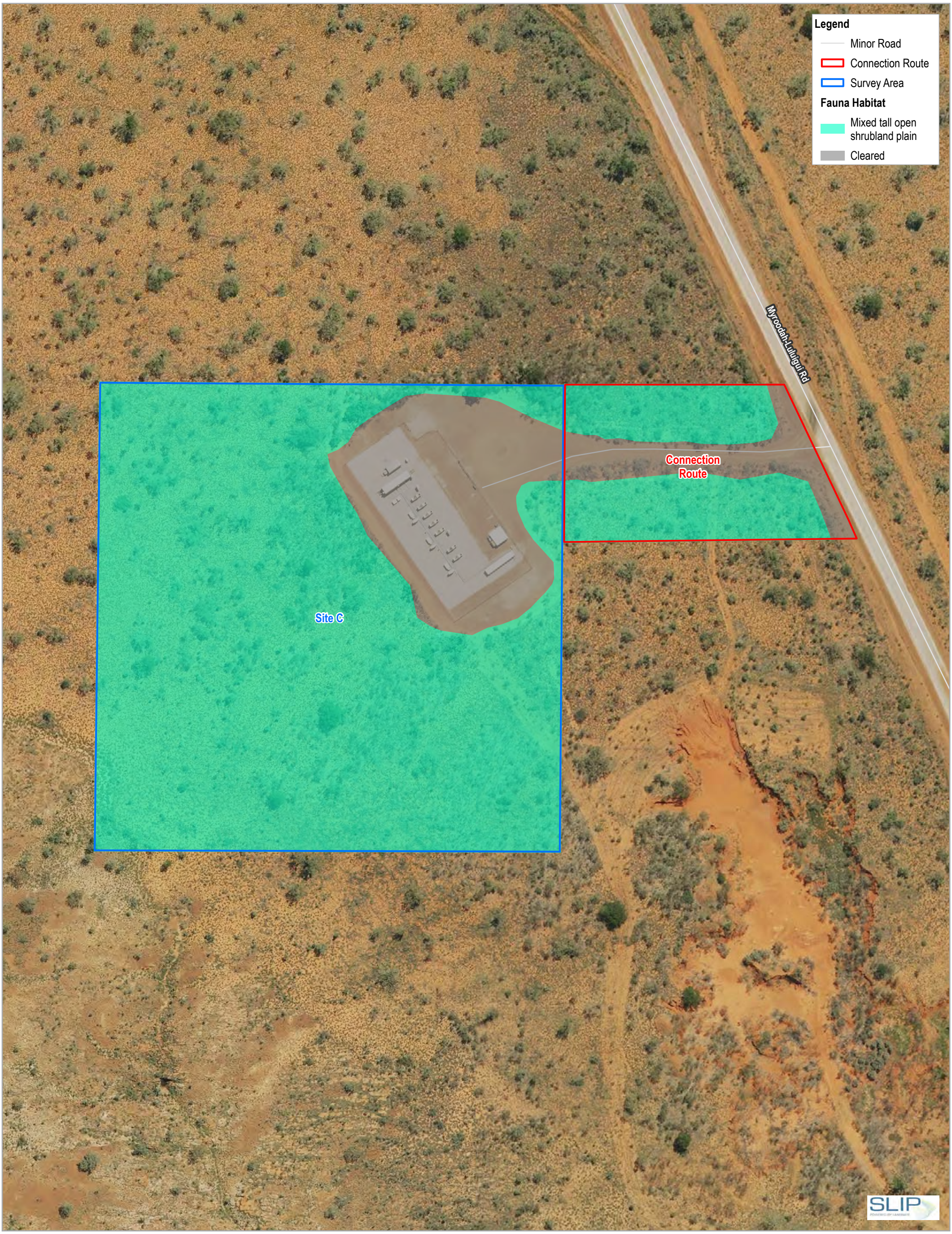
**Vegetation Condition - Camballin/Looma**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**

**FIGURE 5**

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Meters

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GHD

**Horizon Power**
**Kimberley Biological Survey**

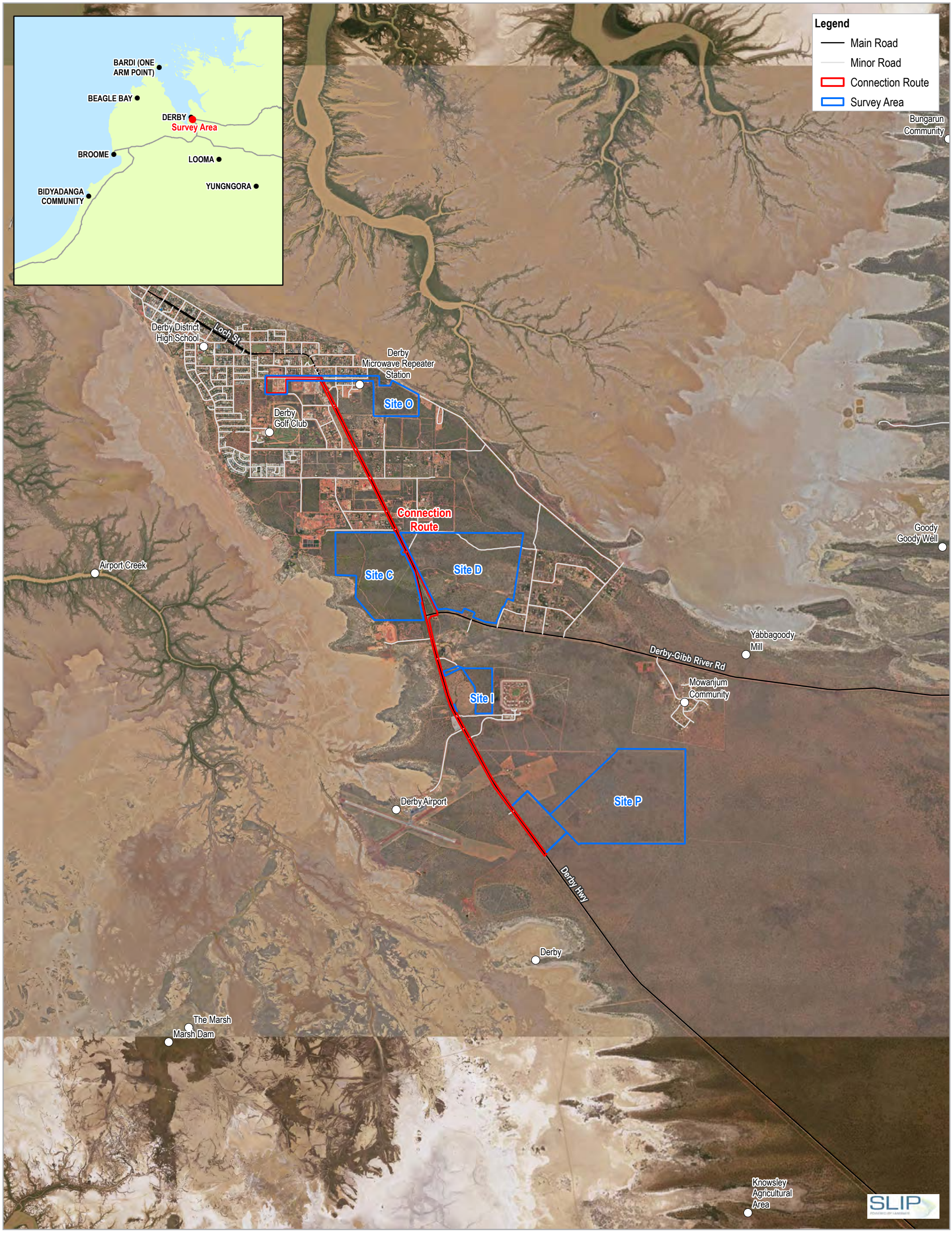
**Fauna Habitat - Camballin/Looma**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**

**FIGURE 6**

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Kilometers

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Horizontal Datum: GDA2020
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N

GHD

**Horizon Power**
**Kimberley Biological Survey**

**Location - Derby**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**

**FIGURE 7**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_007_Location_Derby_Rev0
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**Legend**

- Main Road
- Survey area (20km Buffer)
- Connection Route
- Survey Area

**Hydrography**

- Coastal Waterline
- Estuarine
- Minor River
- Significant Stream
- Major Trib

**Threatened and Priority Flora - Conservation Status**

- Priority 1
- Priority 3

**Fauna Conservation Categories**

- Critically endangered species
- Endangered species
- Vulnerable species
- Species otherwise in need of special protection (other specially protected)
- Migratory species
- Migratory species & Priority 1
- Migratory species & Priority 3
- Migratory species & Priority 4
- Priority 1
- Priority 2
- Priority 3
- Priority 4

**Threatened and Priority Ecological Communities**

- Priority 3

Loch St
Site O
Site C
Site D
Derby-Gibb River Rd
Connection Route
Site I
Site P
Derby Hwy
Alligator Creek
Fitzroy River
Yeeda River
SLIP

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0 2 4 6 8
Kilometers

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**Horizon Power**
**Kimberley Biological Survey**

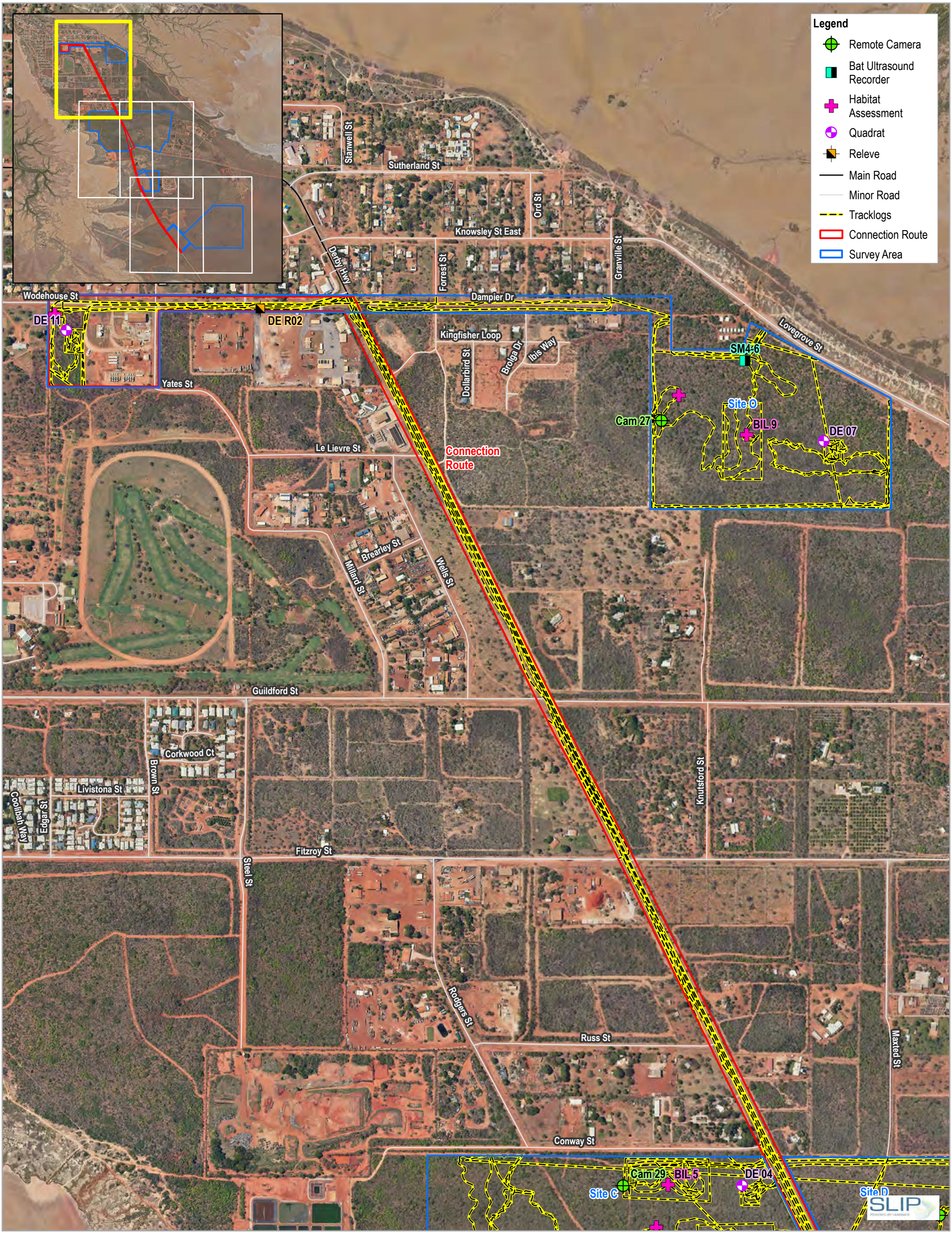
Project No. **12621719**
Revision No. **0**
Date **10/07/2024**

**Environmental Constraints - Derby**

**FIGURE 8**

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**Kimberley Biological Survey**

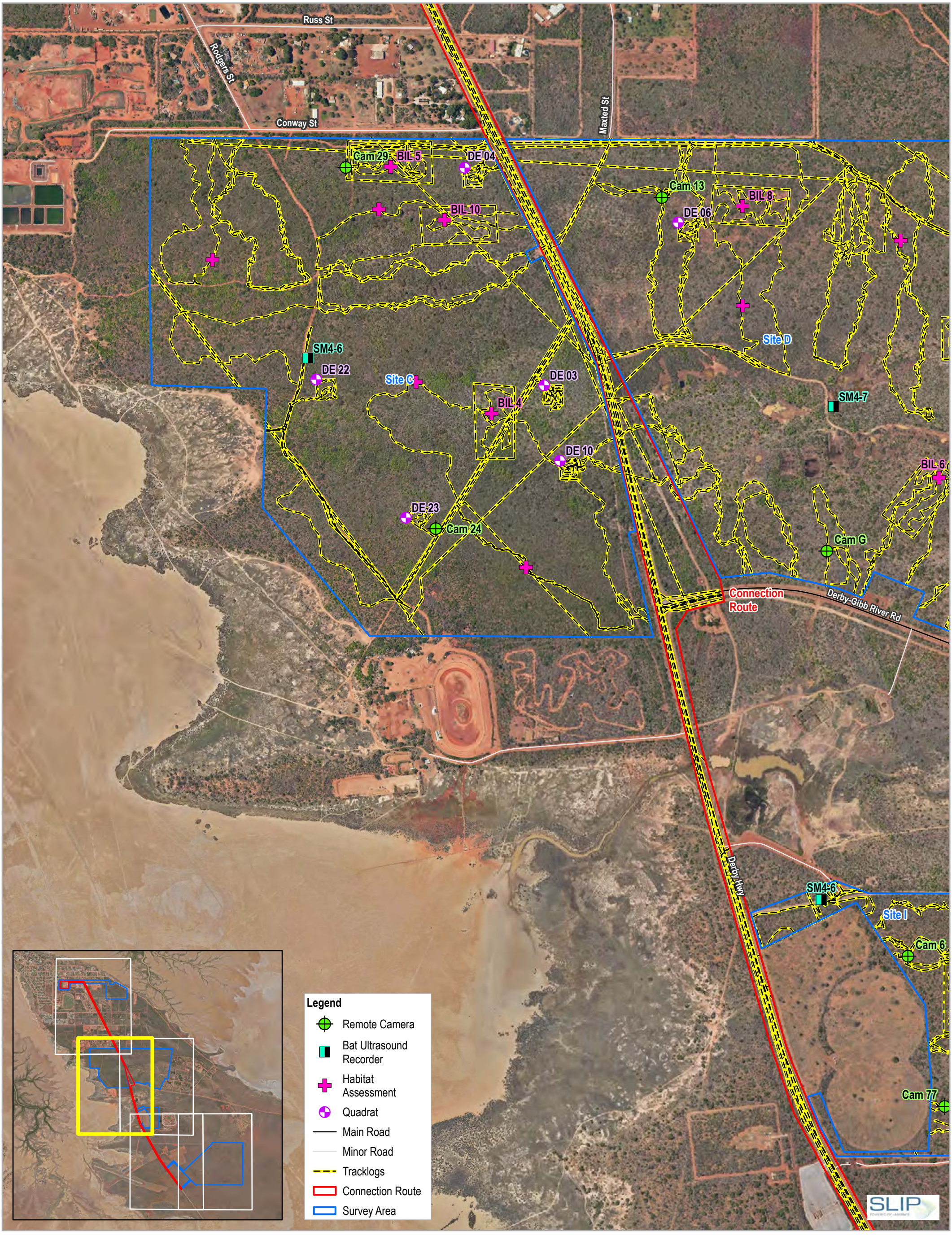
**Survey Effort - Derby**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**


**FIGURE 9**

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GHD

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**Kimberley Biological Survey**

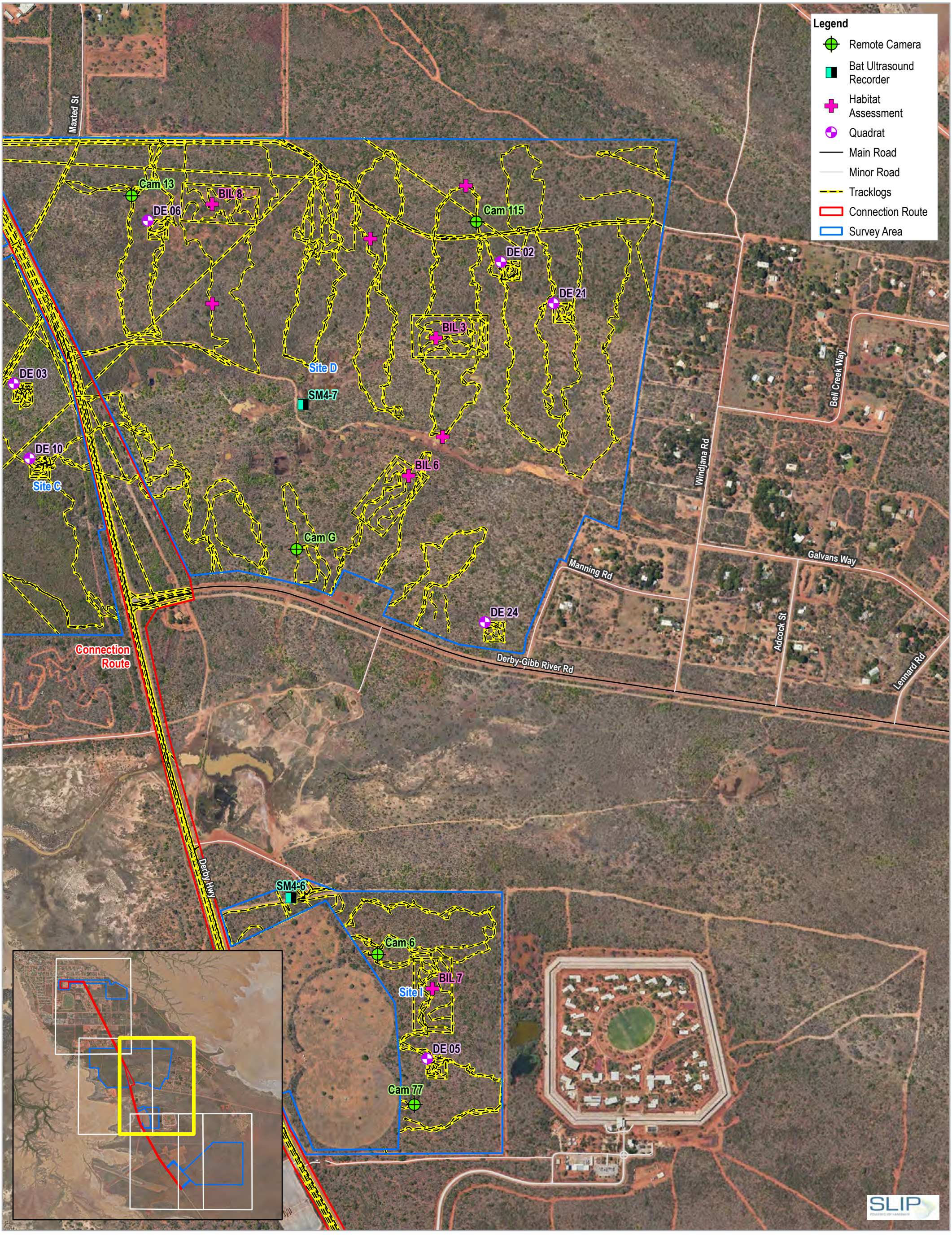
**Survey Effort - Derby**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**


**FIGURE 9**

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**Kimberley Biological Survey**

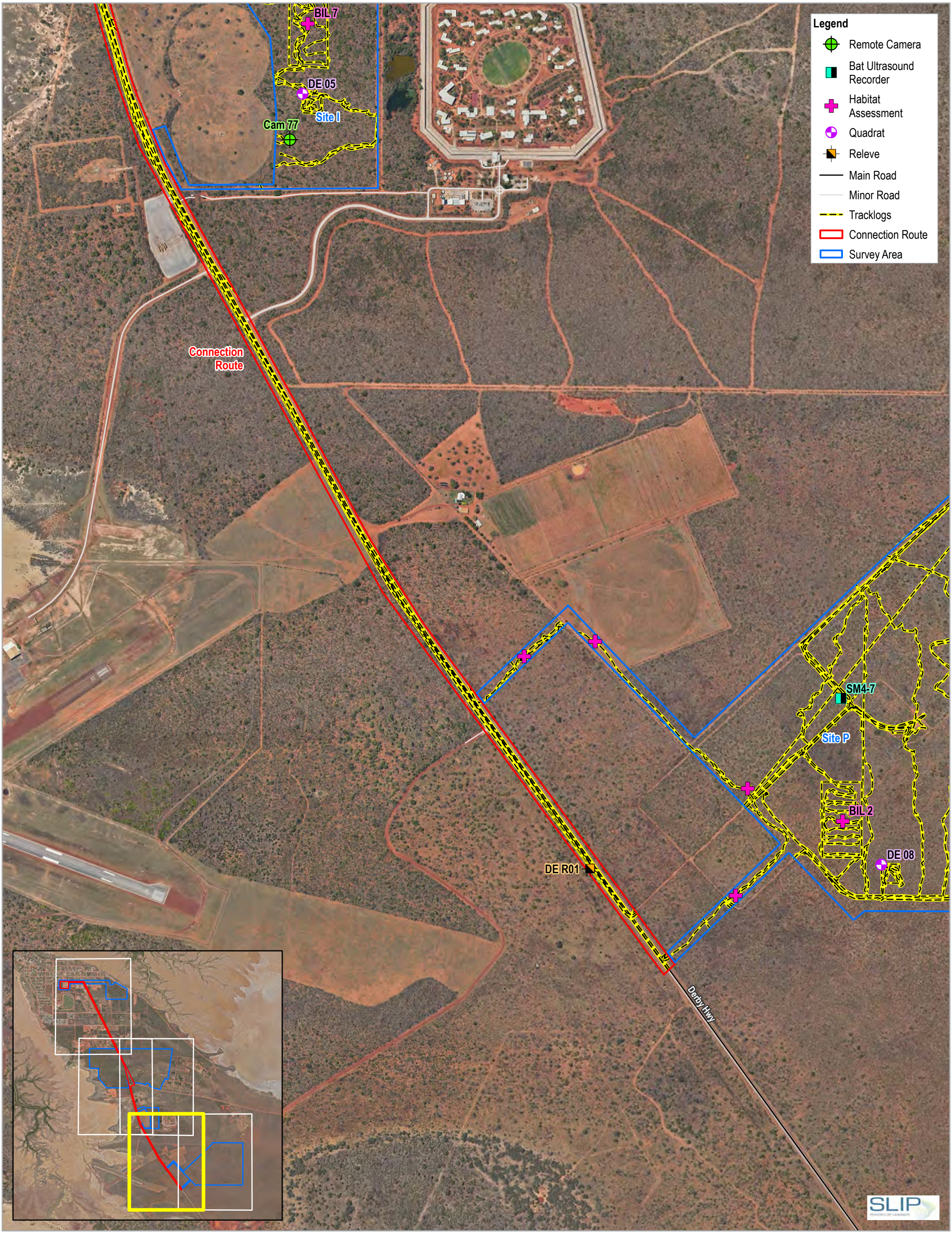
**Survey Effort - Derby**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**


**FIGURE 9**

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Meters

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Grid: GDA2020 MGA Zone 51

**Horizon Power**
**Kimberley Biological Survey**

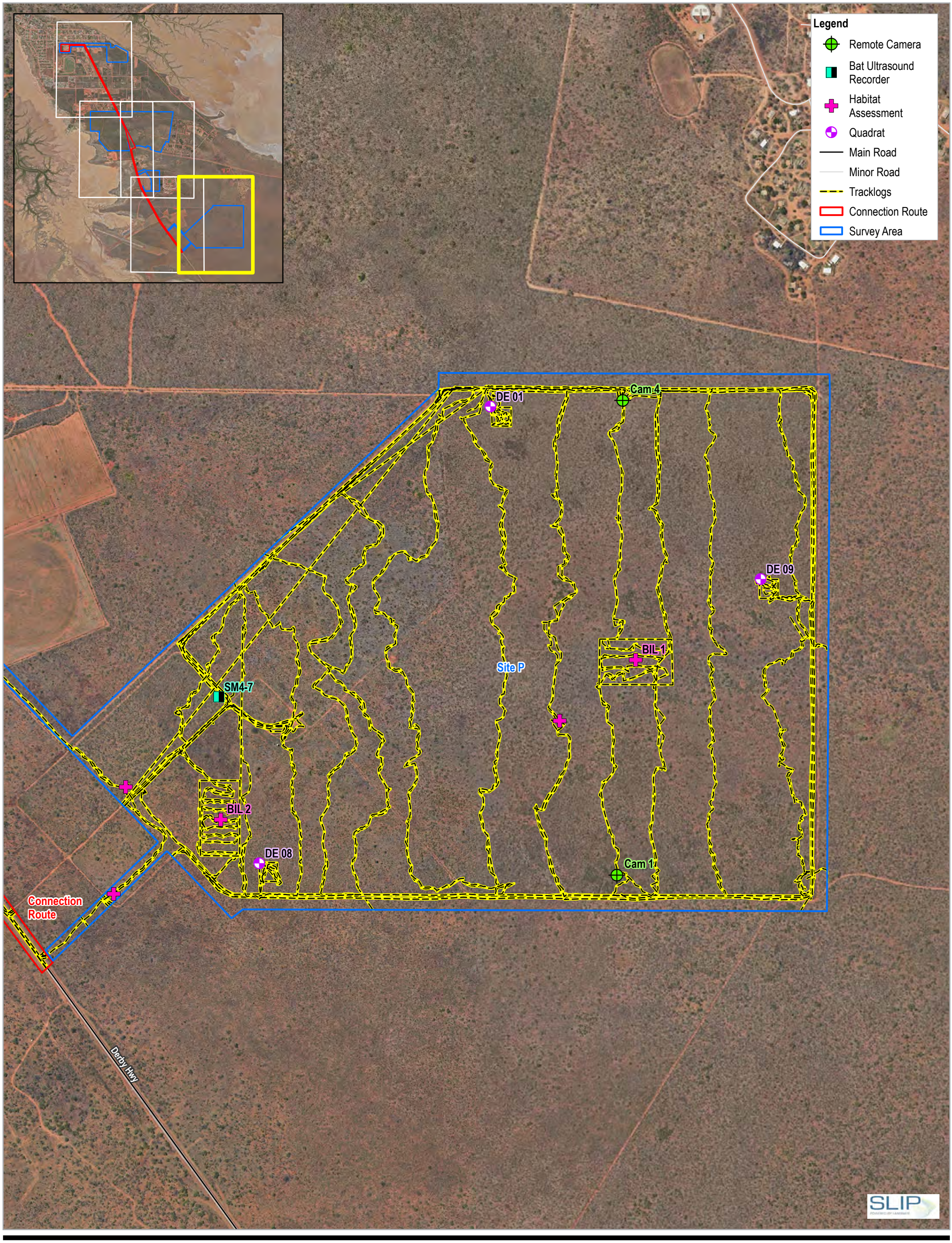
**Survey Effort - Derby**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**


**FIGURE 9**

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Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

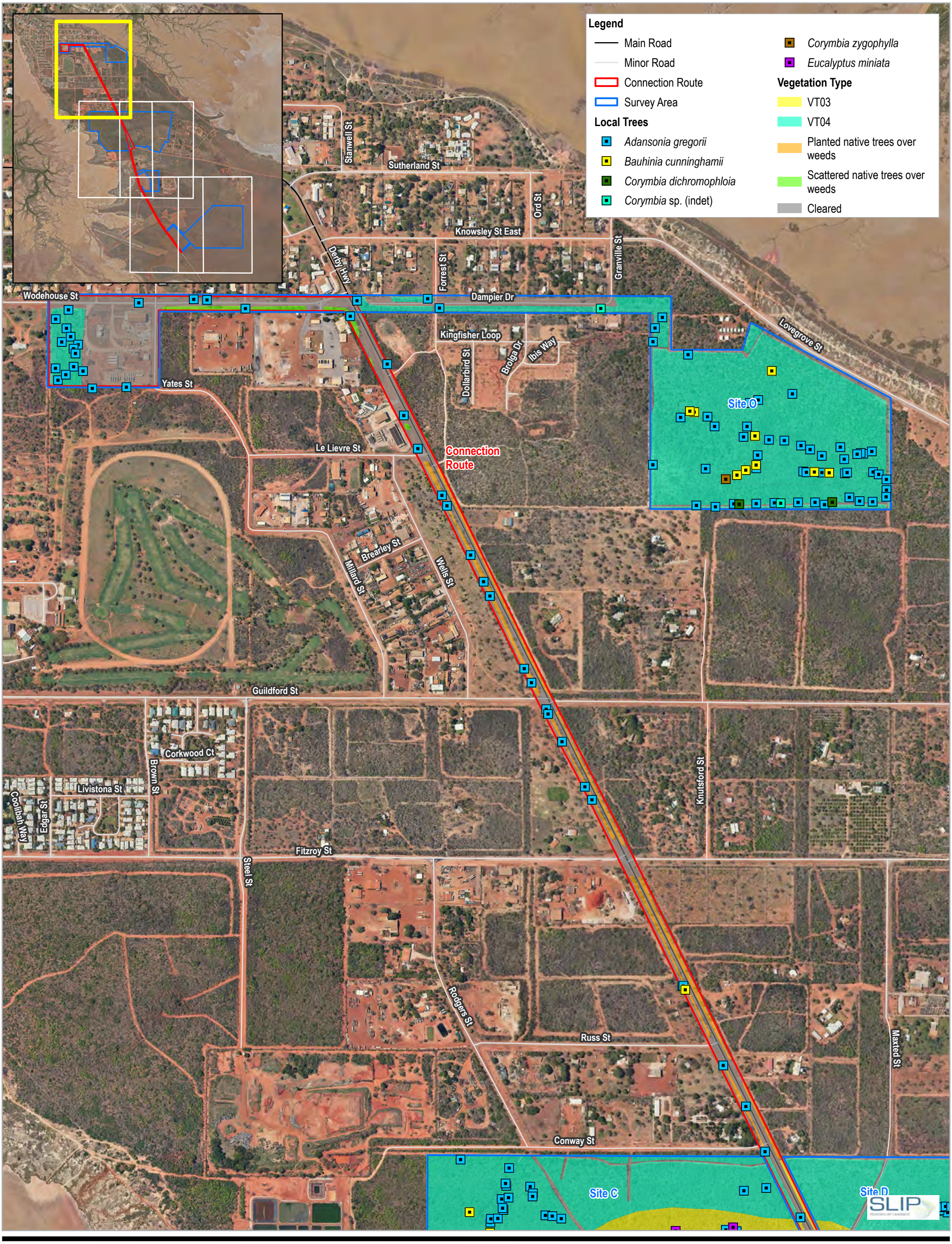
**Survey Effort - Derby**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**


**FIGURE 9**

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N

GHD

**Horizon Power**
**Kimberley Biological Survey**

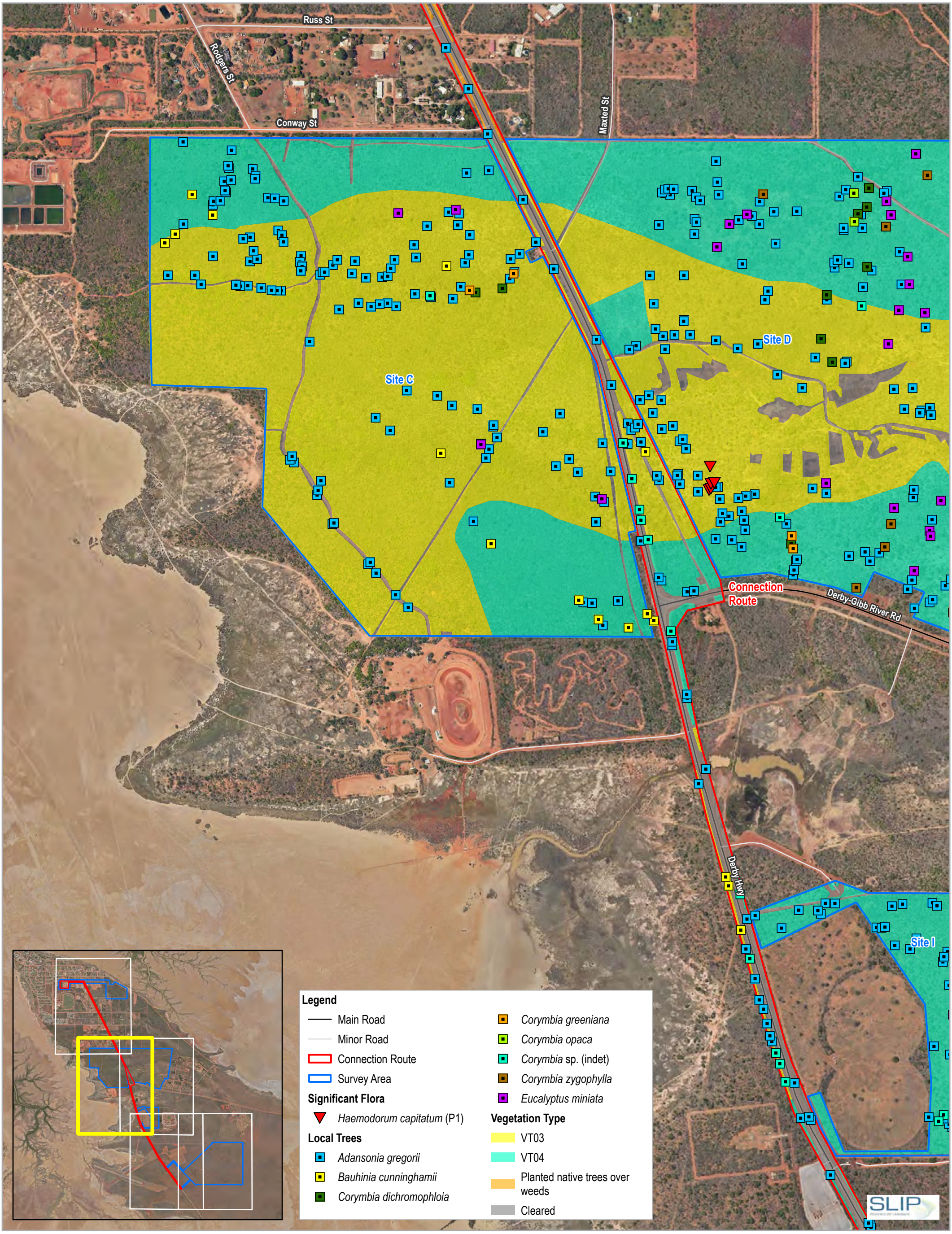
**Vegetation Types, Significant Flora and Local Trees - Derby**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**


**FIGURE 10**

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Paper Size ISO A3
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0 100 200 300 400
Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

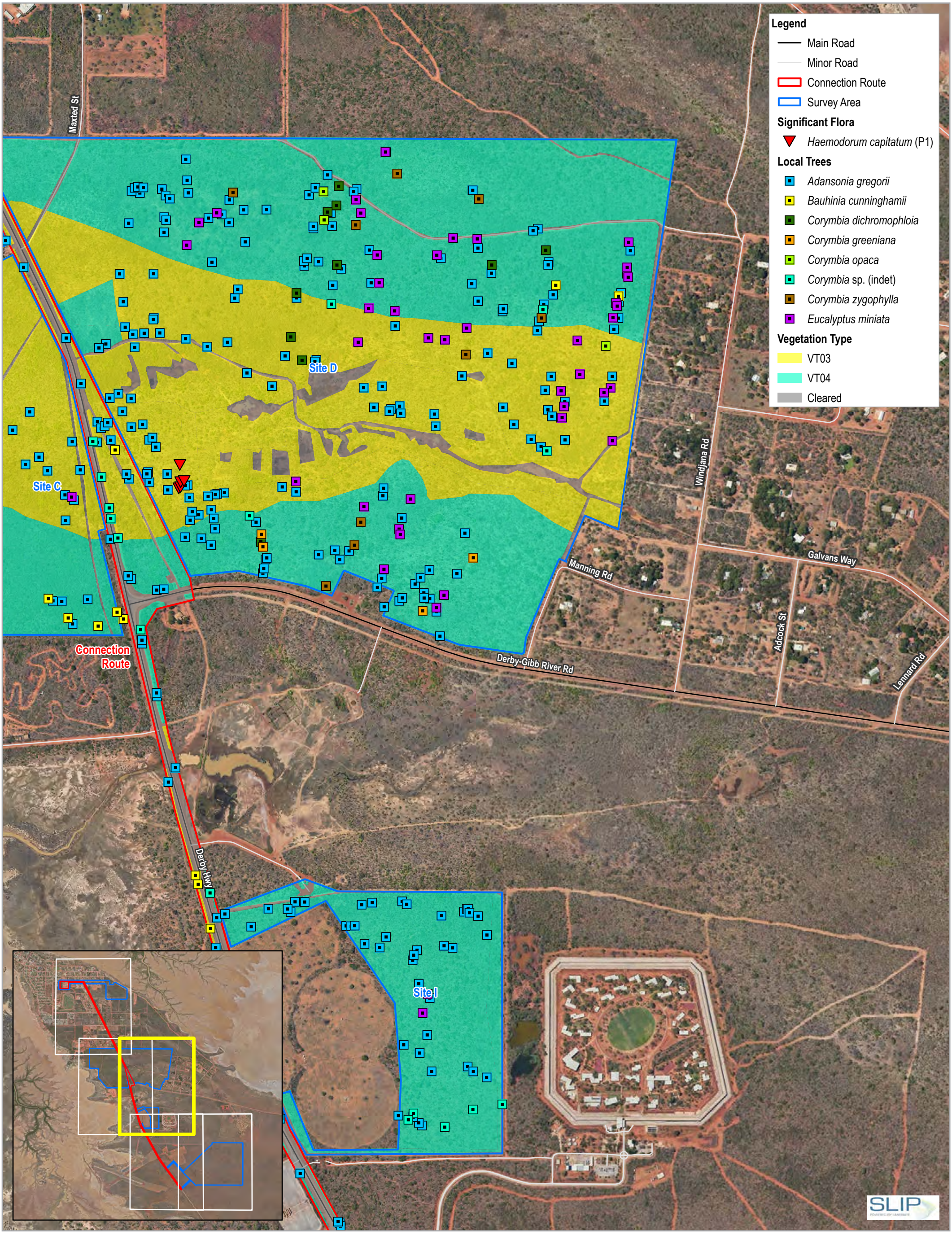
**Vegetation Types, Significant Flora and Local Trees - Derby**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**


**FIGURE 10**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_010_VegTypesSigFlora&LocalTrees_Derby_Rev0
Print date: 10 Jul 2024 - 14:15

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:9,000

0 100 200 300 400
Meters

N

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

GHD

**Horizon Power**
**Kimberley Biological Survey**

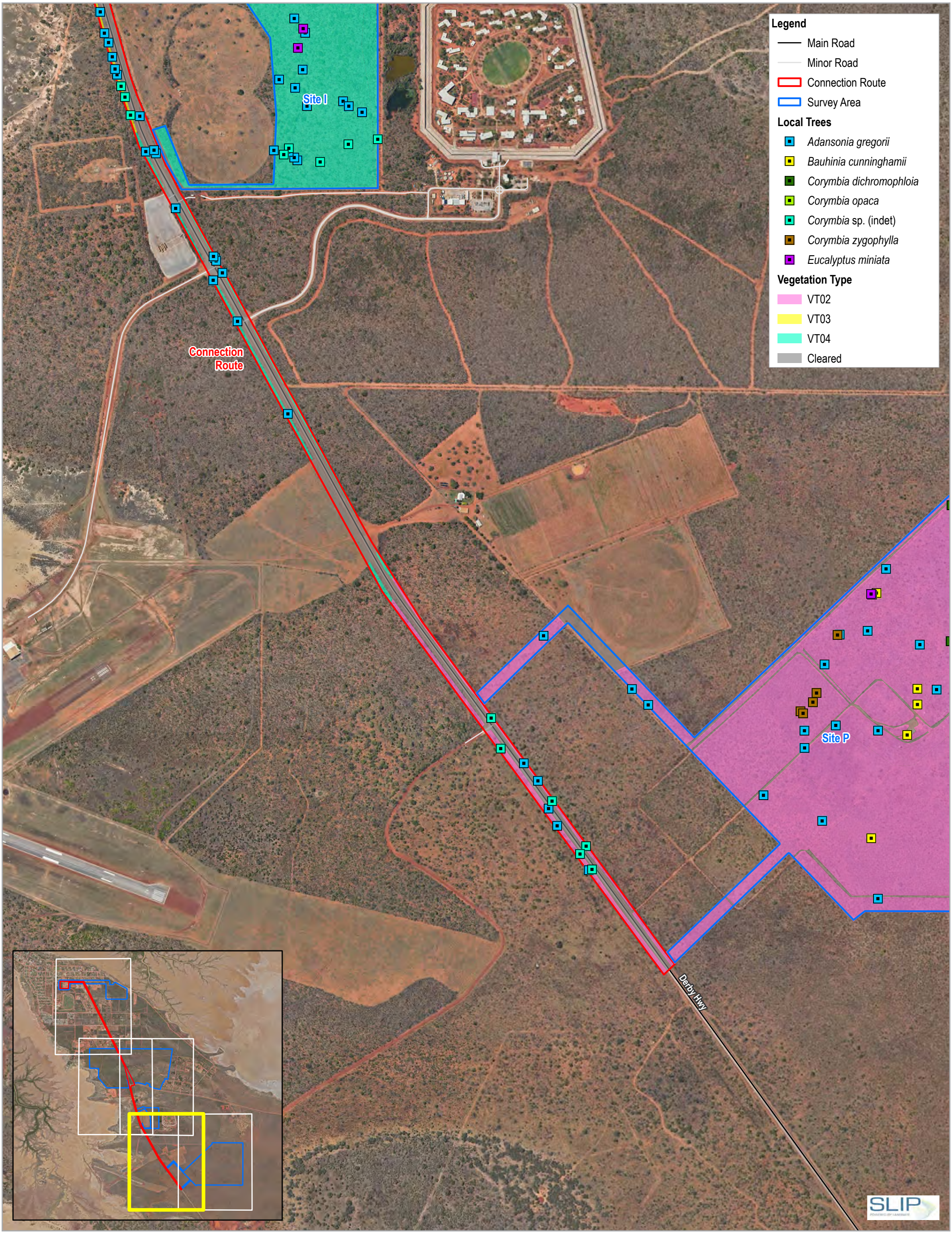
**Vegetation Types, Significant Flora and Local Trees - Derby**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**


**FIGURE 10**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_010_VegTypesSigFlora&LocalTrees_Derby_Rev0
Print date: 10 Jul 2024 - 14:17

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:9,000

0 100 200 300 400

Meters

N

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

**Horizon Power**
**Kimberley Biological Survey**

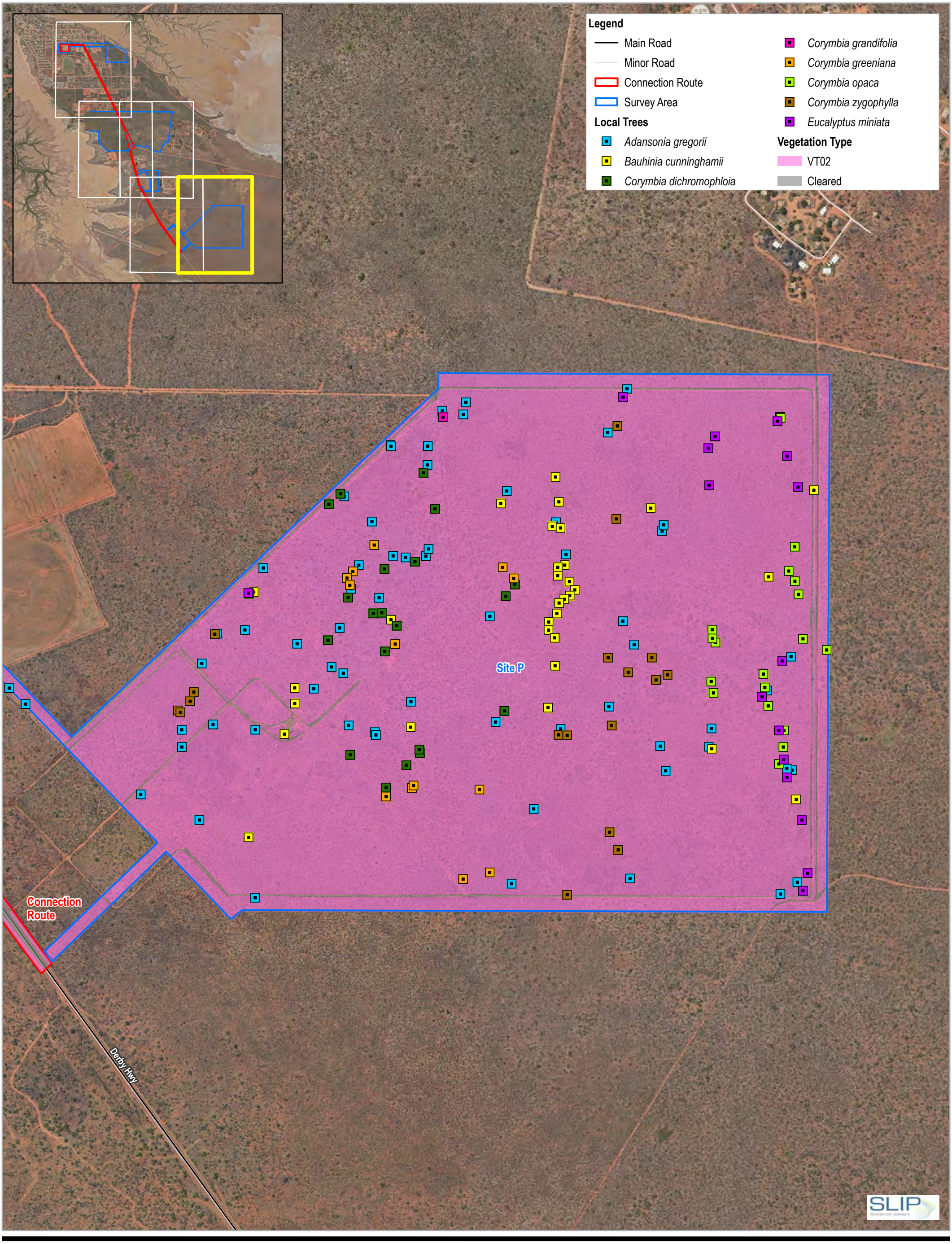
**Vegetation Types, Significant Flora and Local Trees - Derby**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**


**FIGURE 10**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_010_VegTypesSigFlora&LocalTrees_Derby_Rev0
Print date: 10 Jul 2024 - 14:18

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:9,000

0 100 200 300 400

Meters

N

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

GHD

**Horizon Power**
**Kimberley Biological Survey**

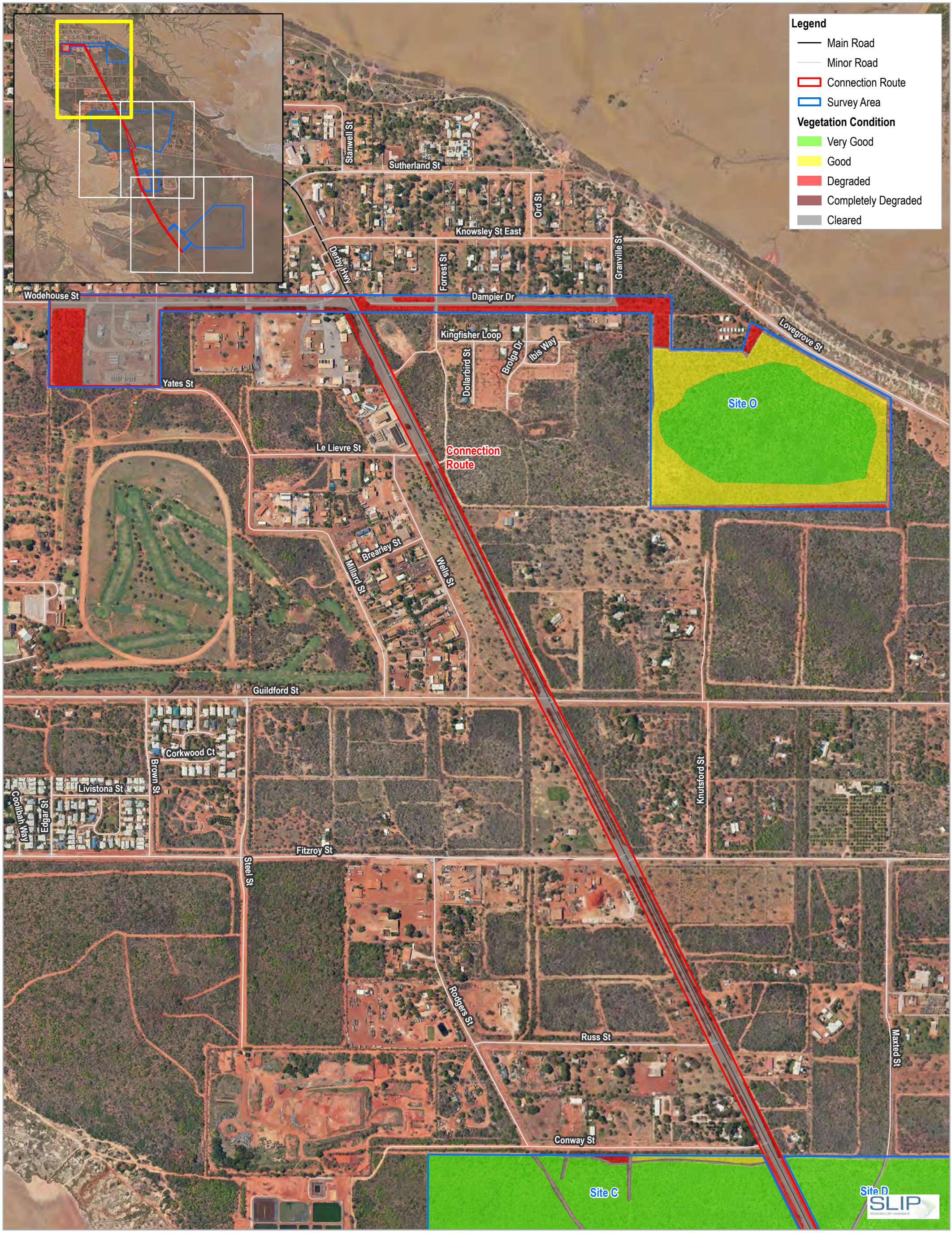
**Vegetation Types, Significant Flora and Local Trees - Derby**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**


**FIGURE 10**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_010_VegTypesSigFlora&LocalTrees_Derby_Rev0
Print date: 10 Jul 2024 - 14:21

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:9,000

0 100 200 300 400

Meters

N

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

**Horizon Power**
**Kimberley Biological Survey**

**Vegetation Condition - Derby**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**


**FIGURE 11**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_011_VegCondition_Derby_Rev0
Print date: 10 Jul 2024 - 14:29

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez

Russ St
Rodgers St
Conway St
Maxted St
Site C
Site D
Connection Route
Derby-Gibb River Rd
Derby Hwy
Site I
SLIP

**Legend**

- Main Road
- Minor Road
- Connection Route
- Survey Area

**Vegetation Condition**

- Very Good
- Good
- Degraded
- Completely Degraded
- Cleared

Paper Size ISO A3
at Scale: 1:9,000

0 100 200 300 400
Meters

N

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

GHD

**Horizon Power**
**Kimberley Biological Survey**

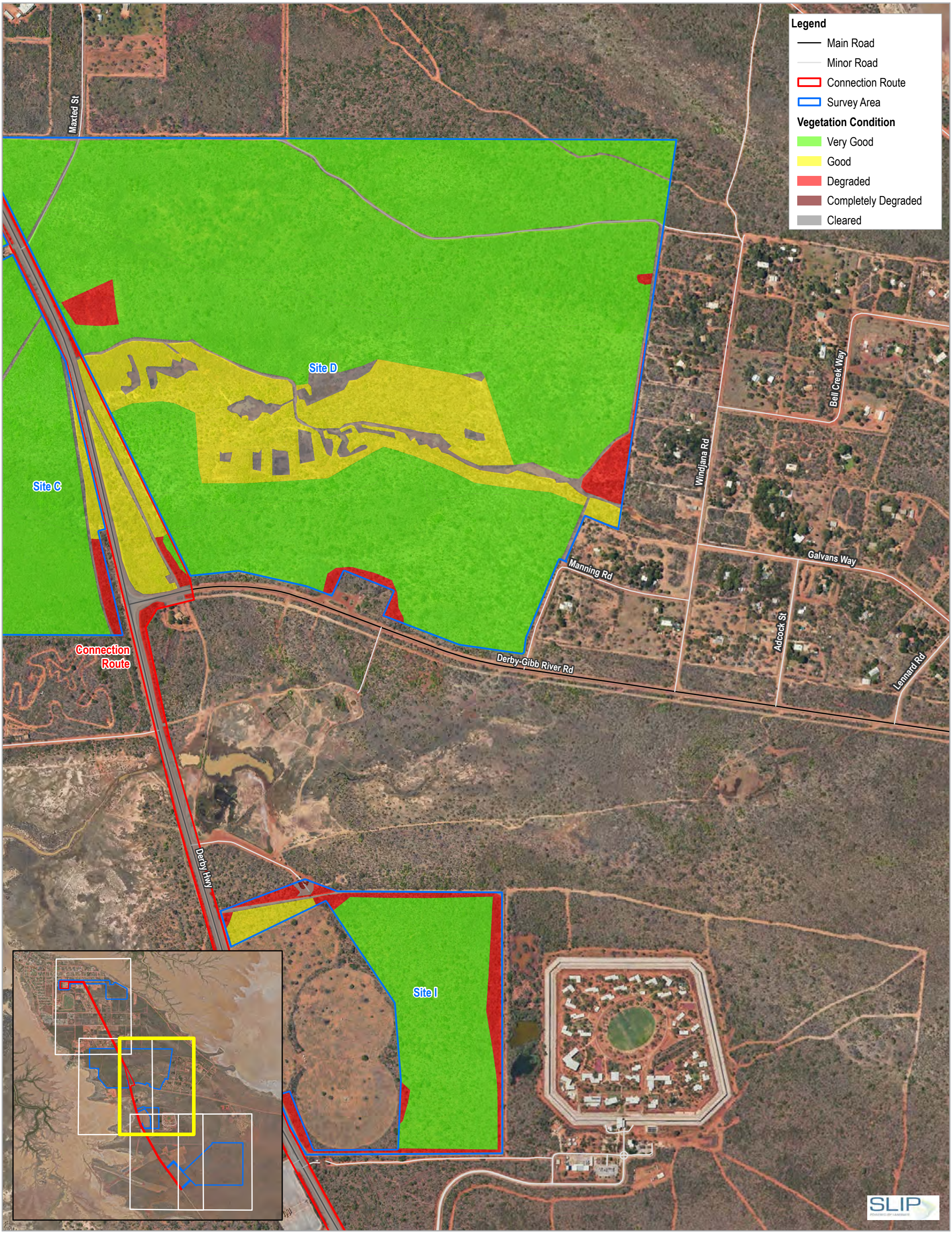
**Vegetation Condition - Derby**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**


**FIGURE 11**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_011_VegCondition_Derby_Rev0
Print date: 10 Jul 2024 - 14:40

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:9,000

0 100 200 300 400
Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

**Vegetation Condition - Derby**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**


**FIGURE 11**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_011_VegCondition_Derby_Rev0
Print date: 10 Jul 2024 - 14:38

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez

Site I

Connection Route

Site P

Derby Hwy

**Legend**

- Main Road
- Minor Road
- Connection Route
- Survey Area

**Vegetation Condition**

- Very Good
- Good
- Degraded
- Cleared

SLIP

Paper Size ISO A3
at Scale: 1:9,000

0 100 200 300 400

Meters

N

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

GHD

**Horizon Power**
**Kimberley Biological Survey**

**Vegetation Condition - Derby**

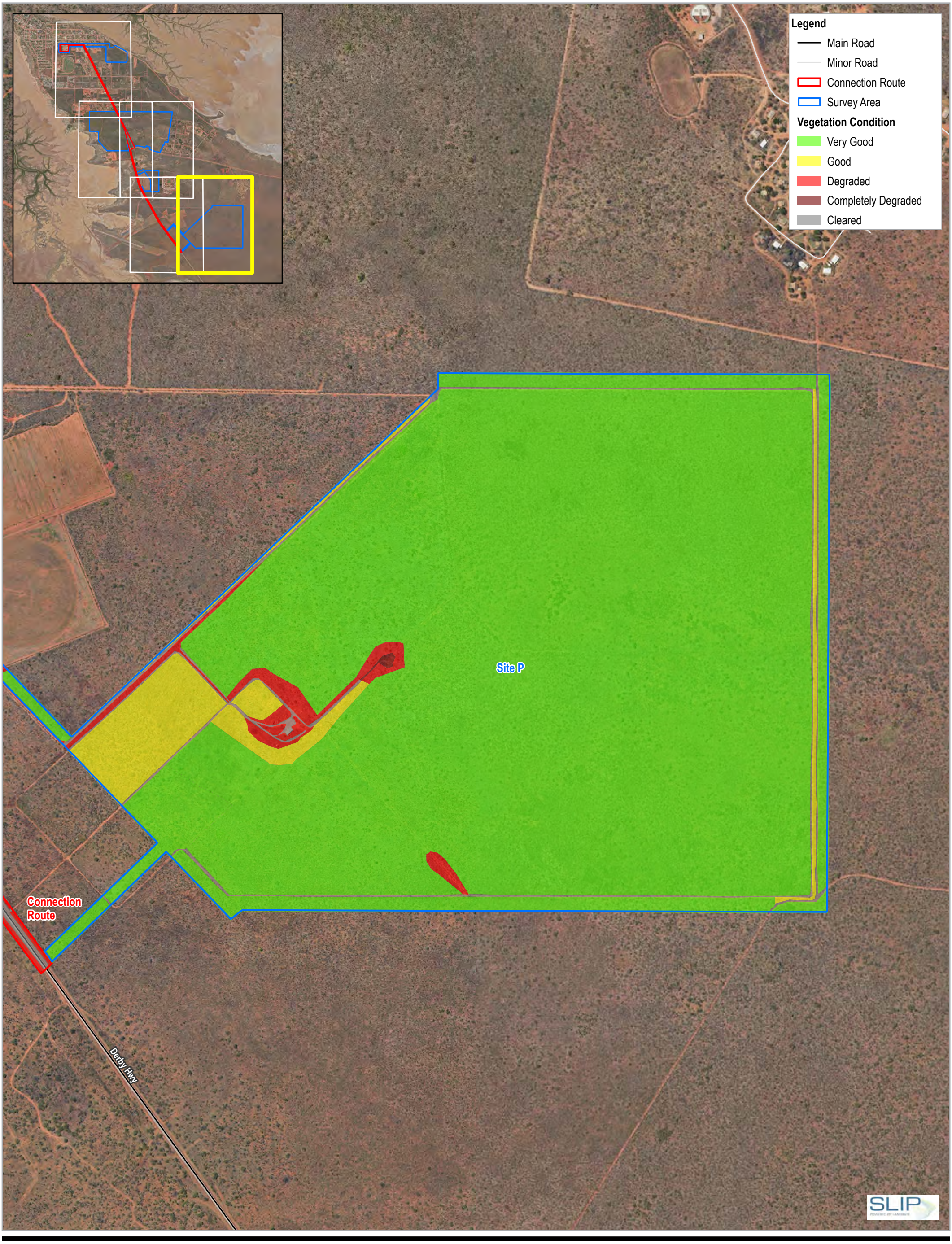
Project No. **12621719**
Revision No. **0**
Date **10/07/2024**



**FIGURE 11**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_011_VegCondition_Derby_Rev0
Print date: 10 Jul 2024 - 14:36

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:9,000

0 100 200 300 400

Meters

N

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

GHD

**Horizon Power**
**Kimberley Biological Survey**

**Vegetation Condition - Derby**

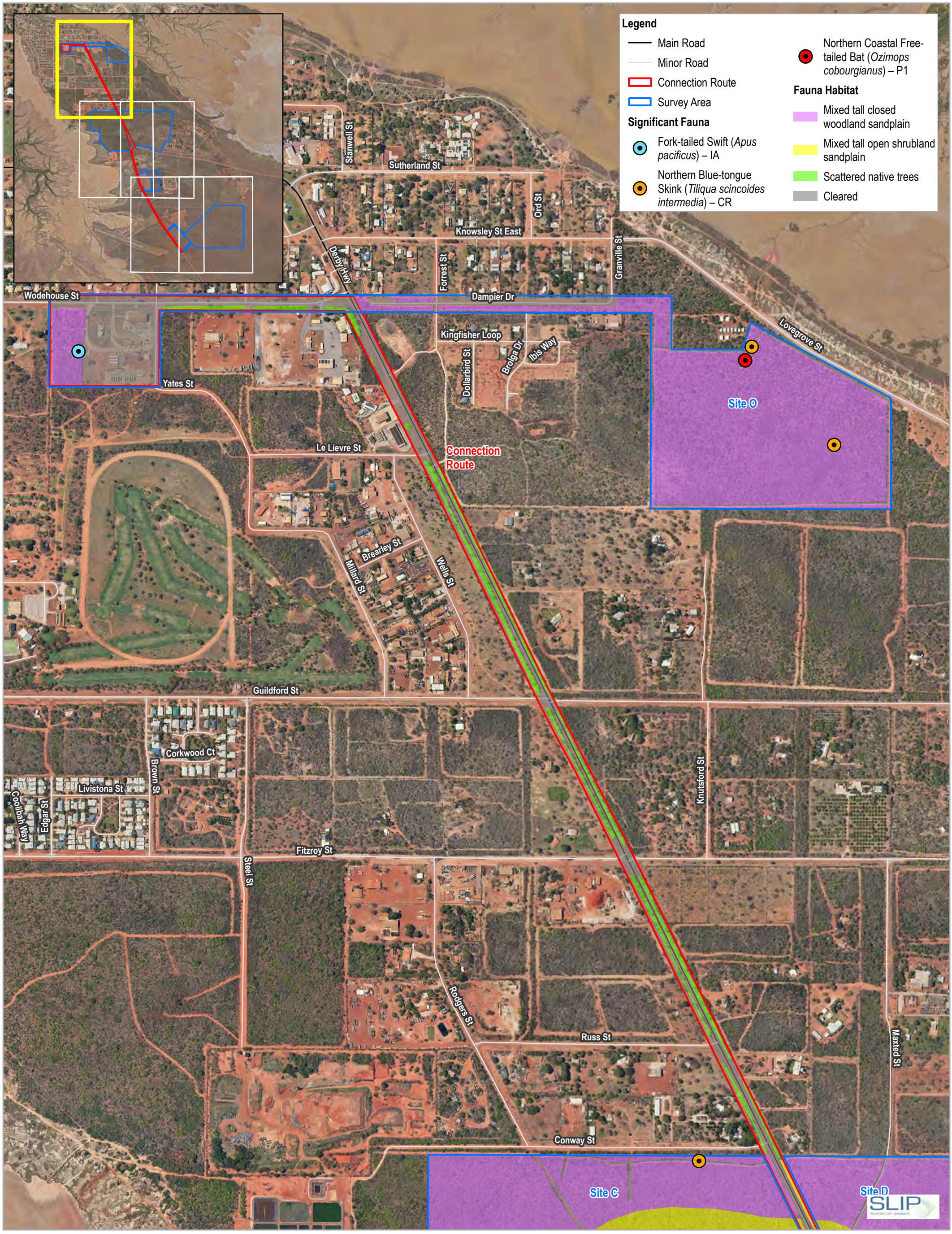
Project No. **12621719**
Revision No. **0**
Date **10/07/2024**



**FIGURE 11**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_011_VegCondition_Derby_Rev0
Print date: 10 Jul 2024 - 14:29

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:9,000

0 100 200 300 400
Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

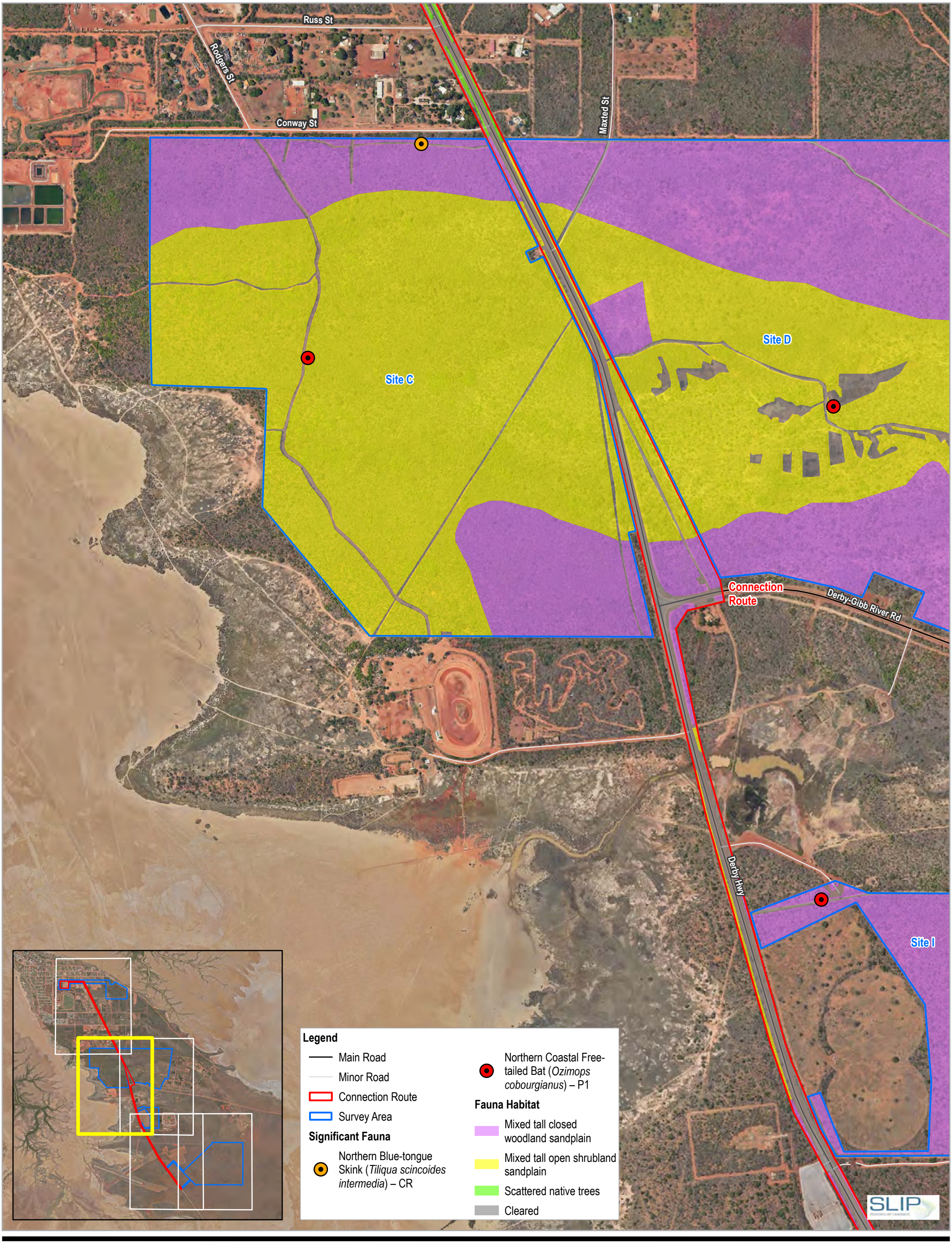
**Fauna Habitat and Significant Fauna - Derby**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**

Page 1 of 5
**FIGURE 12**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_012_FaunaHabitat&SigFauna_Derby_Rev0
Print date: 10 Jul 2024 - 14:49

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:9,000

0 100 200 300 400
Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

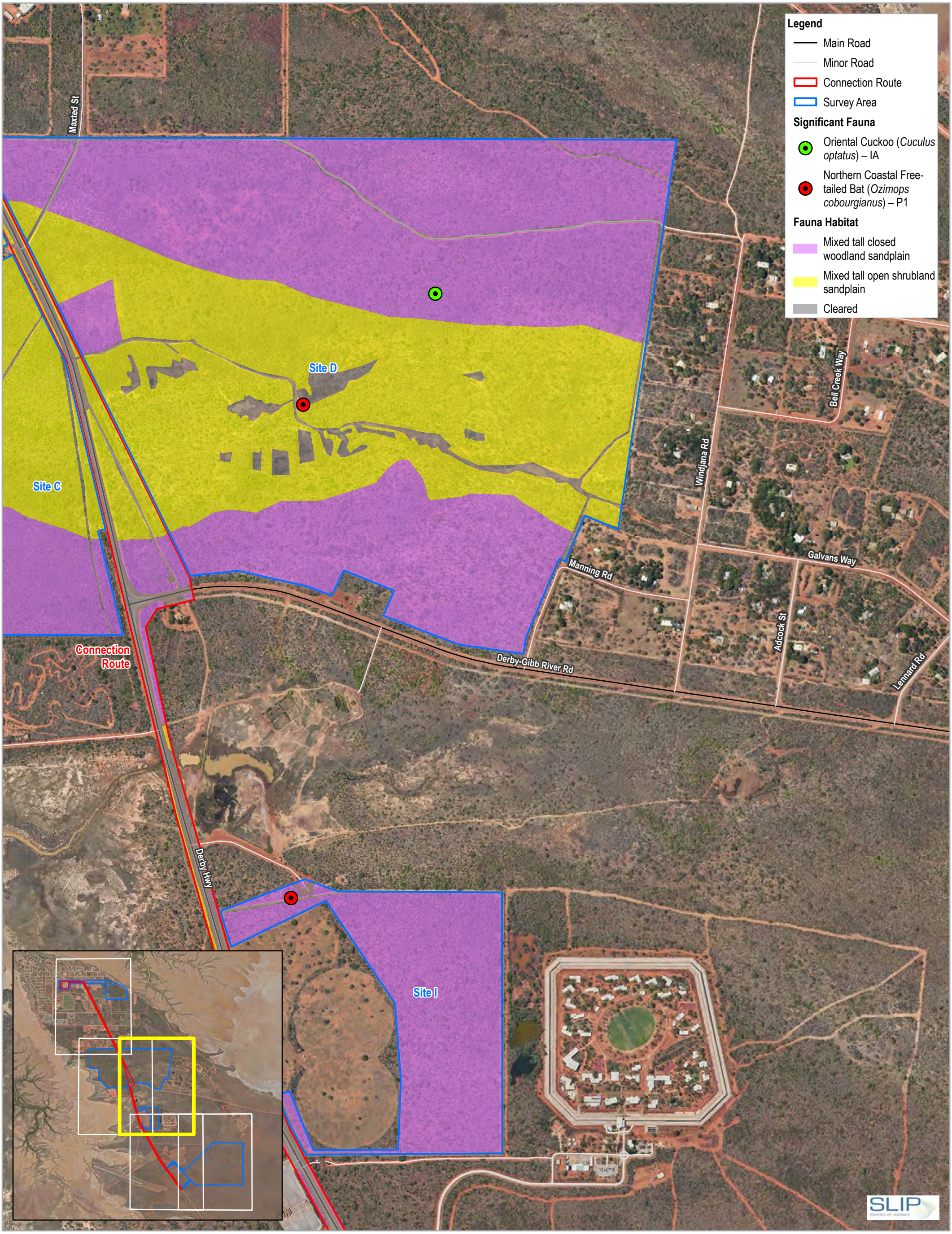
**Fauna Habitat and Significant Fauna - Derby**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**


**FIGURE 12**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_012_FaunaHabitat&SigFauna_Derby_Rev0
Print date: 10 Jul 2024 - 14:41

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:9,000

0 100 200 300 400
Meters

N

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

GHD

**Horizon Power**
**Kimberley Biological Survey**

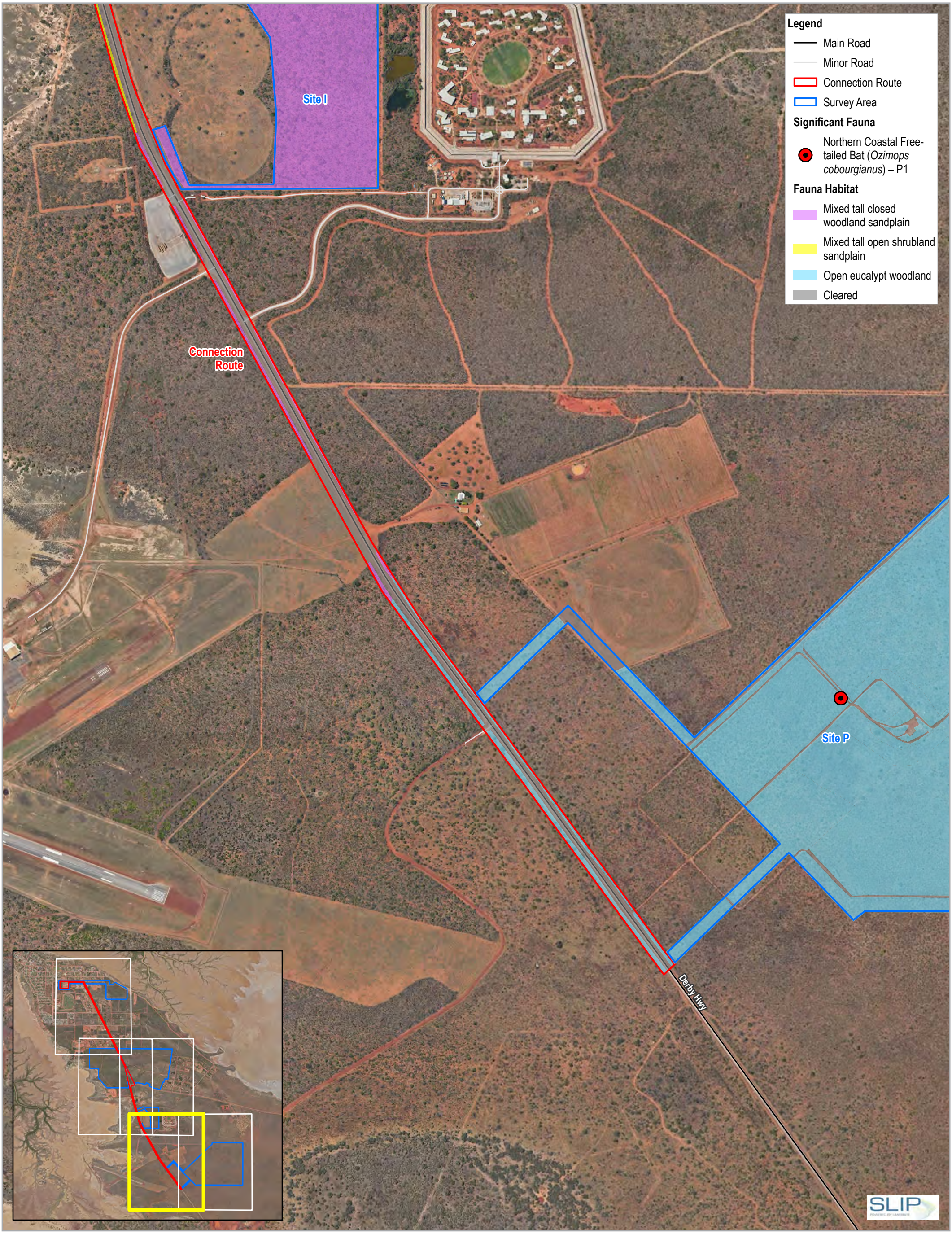
**Fauna Habitat and Significant Fauna - Derby**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**


**FIGURE 12**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_012_FaunaHabitat&SigFauna_Derby_Rev0
Print date: 10 Jul 2024 - 14:46

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:9,000

0 100 200 300 400

Meters

N

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

GHD

**Horizon Power**
**Kimberley Biological Survey**

**Fauna Habitat and Significant Fauna - Derby**

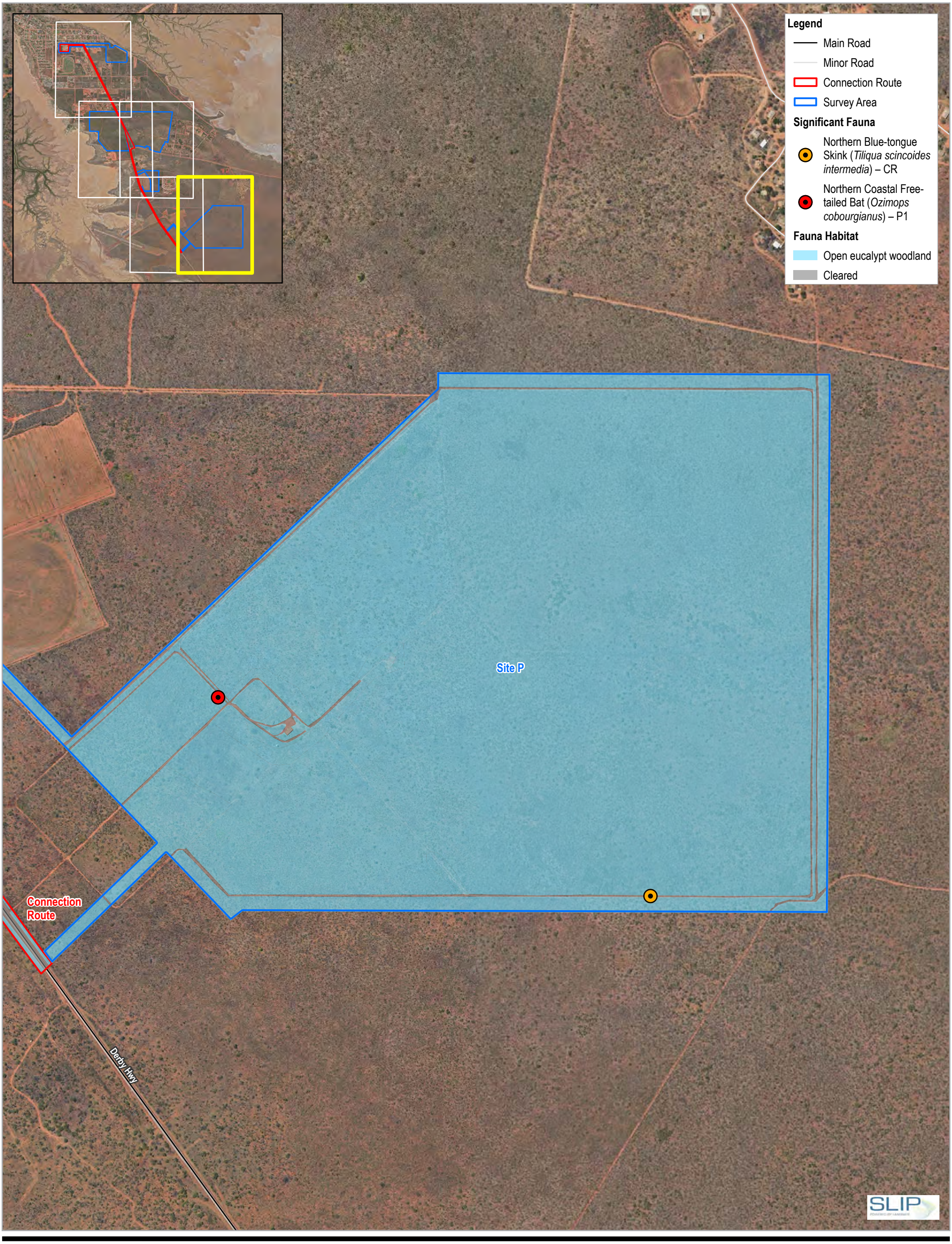
Project No. **12621719**
Revision No. **0**
Date **10/07/2024**



**FIGURE 12**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_012_FaunaHabitat&SigFauna_Derby_Rev0
Print date: 10 Jul 2024 - 14:47

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:9,000

0 100 200 300 400

Meters

N

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

GHD

**Horizon Power**
**Kimberley Biological Survey**

**Fauna Habitat and Significant Fauna - Derby**

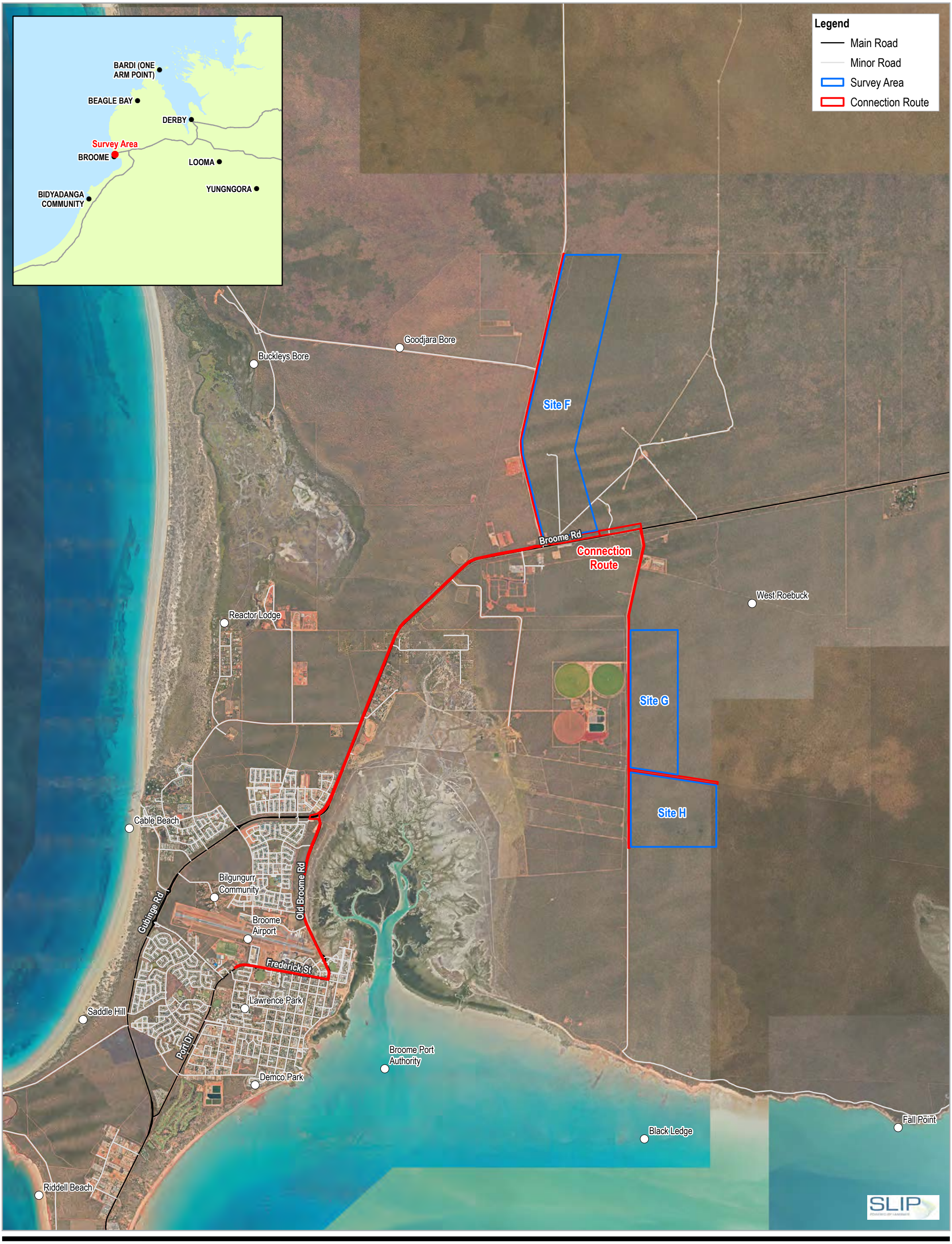
Project No. **12621719**
Revision No. **0**
Date **10/07/2024**



**FIGURE 12**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_012_FaunaHabitat&SigFauna_Derby_Rev0
Print date: 10 Jul 2024 - 14:50

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:60,000

0 0.5 1 1.5 2

Kilometers

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

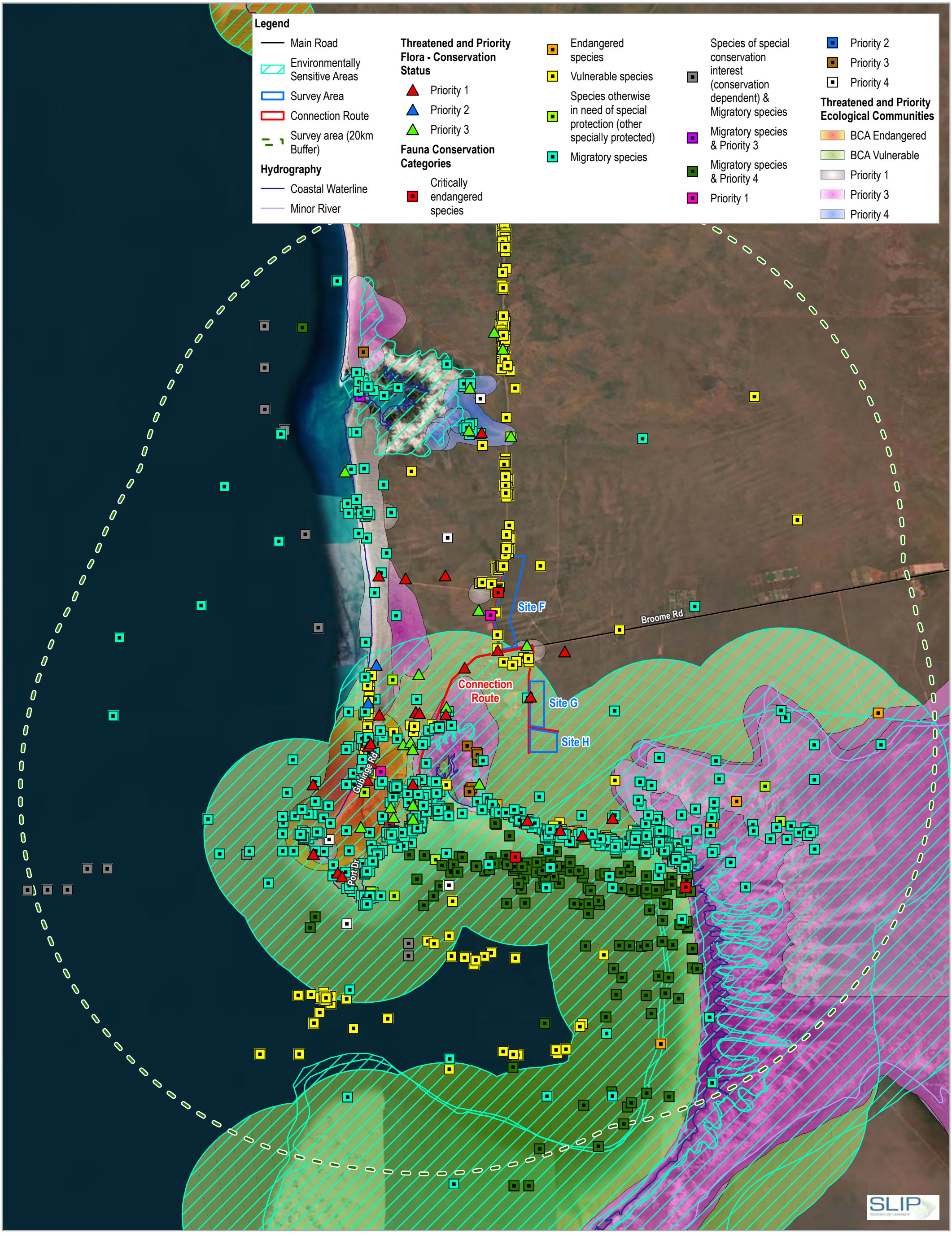
**Location - Broome**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**

**FIGURE 13**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_013_Location_Broome_Rev0
Print date: 10 Jul 2024 - 14:58

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:180,000

0 2 4 6 8
Kilometers

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

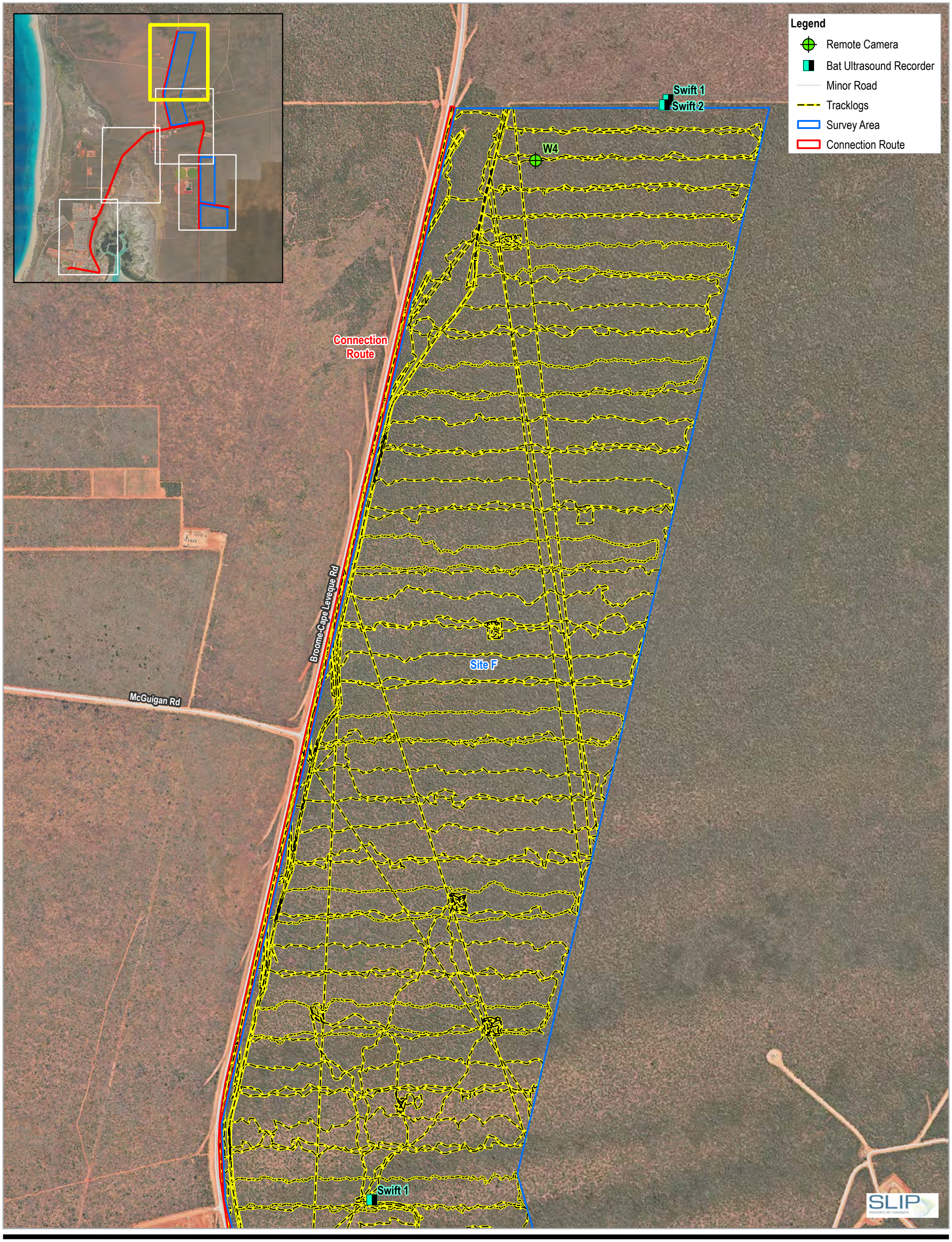
**Environmental Constraints - Broome**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**

**FIGURE 14**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_014_EnvironmentalConstraints_Broome_Rev0
Print date: 10 Jul 2024 - 14:59

Data source: World Imagery: Earthstar Geographics. Created by: klabez




Paper Size ISO A3
at Scale: 1:11,000

0 100 200 300 400

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

**Survey Effort - Broome**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**


**FIGURE 15**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_015_SurveyEffort_Broome_Rev0
Print date: 10 Jul 2024 - 15:10

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez

Legend
- Remote Camera
- Bat Ultrasound Recorder
- Main Road
- Minor Road
- Tracklogs
- Survey Area
- Connection Route

Site F
Swift 1
P5
Broome-Cape Leveque Rd
Swift 1
W13
HF10
HF10
Connection Route
Broome Rd
HF10
Swift 1
Warrgamburu Dr
Katsuyama Rd
Crab Creek Rd
Swift 1
P5
Swift 2
P5
Site G
SLIP

Paper Size ISO A3
at Scale: 1:11,000

0 100 200 300 400
Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

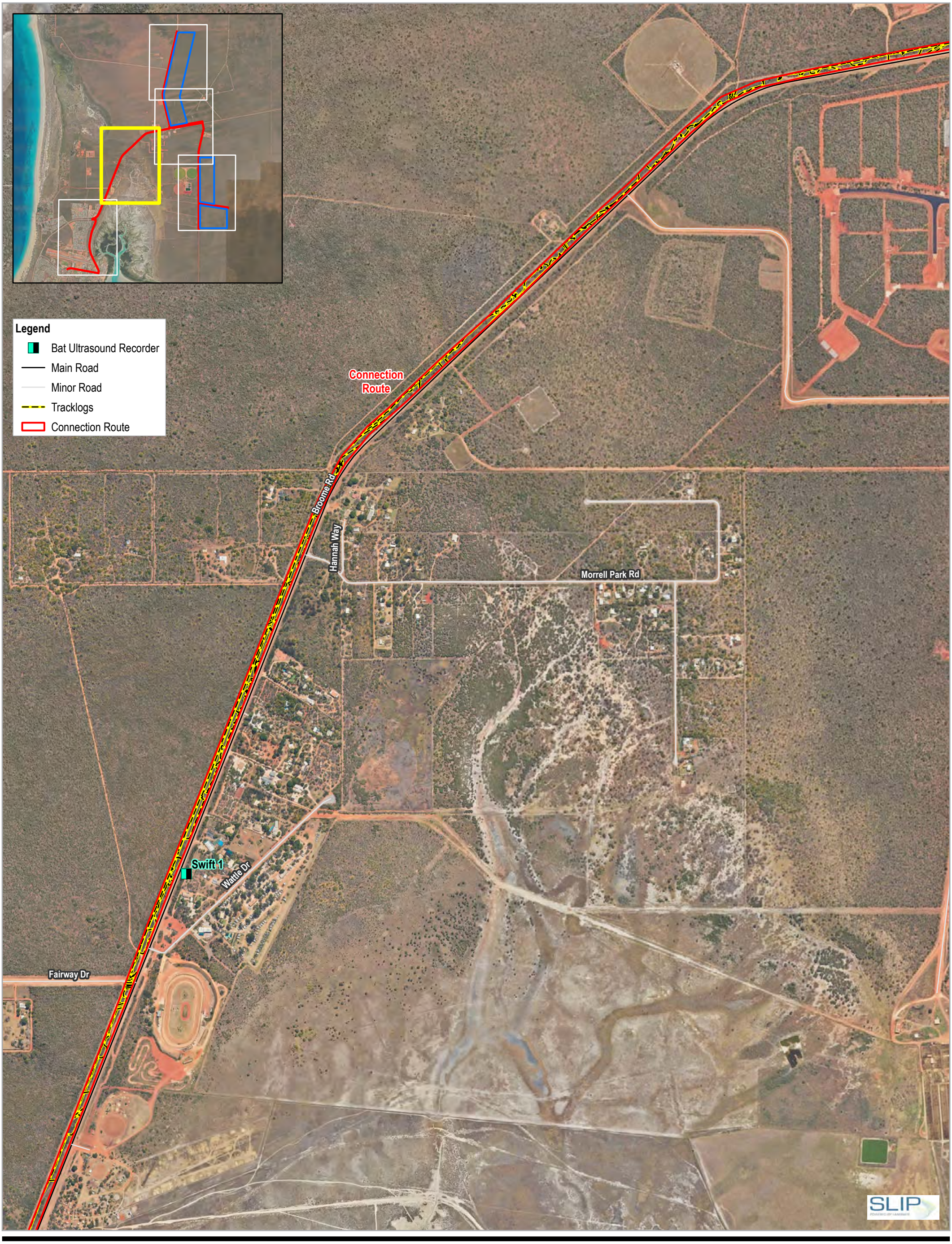
**Survey Effort - Broome**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**



\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_015_SurveyEffort_Broome_Rev0
Print date: 10 Jul 2024 - 15:36

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:11,000

0 100 200 300 400
Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

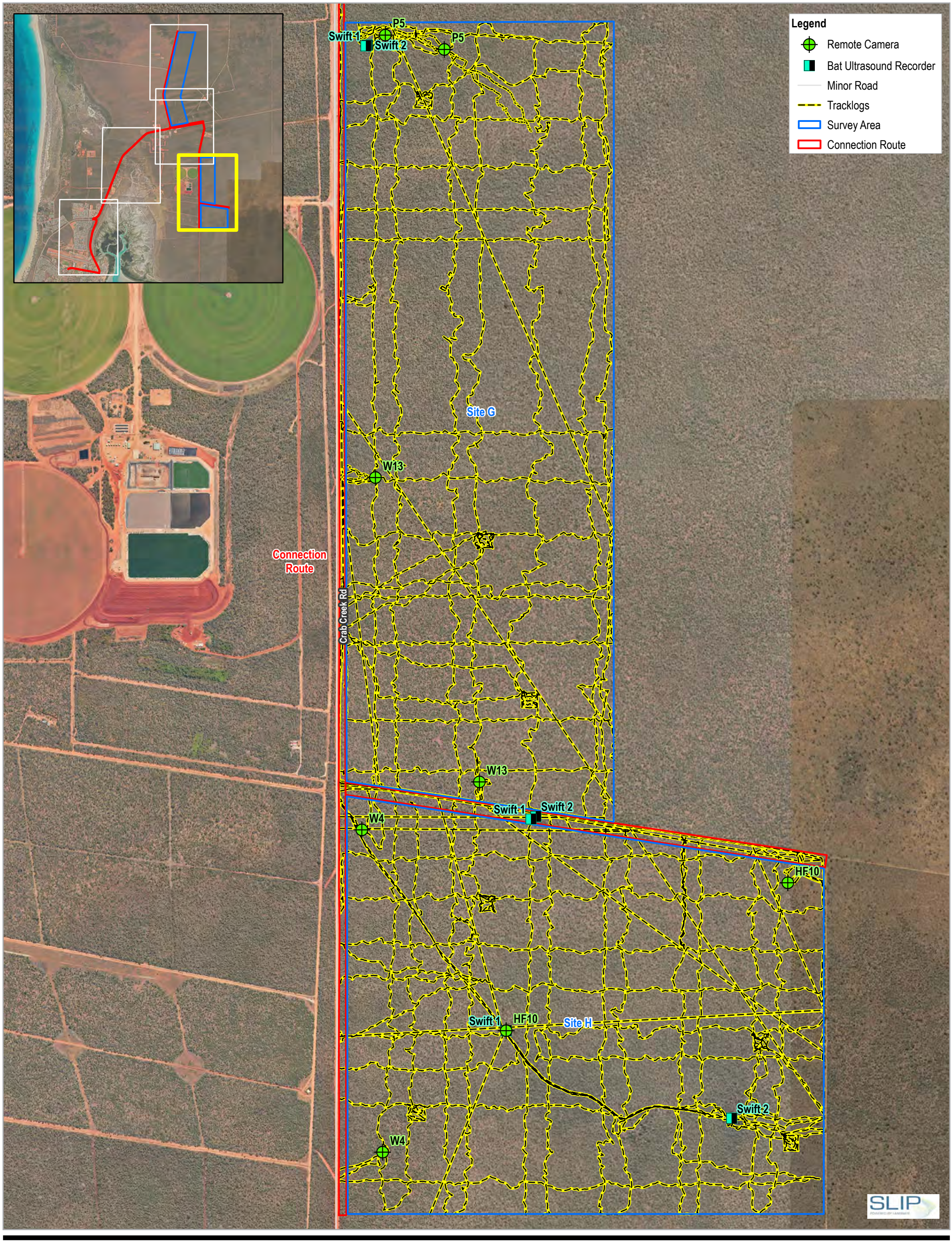
**Survey Effort - Broome**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**


**FIGURE 15**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_015_SurveyEffort_Broome_Rev0
Print date: 10 Jul 2024 - 15:14

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:11,000

0 100 200 300 400

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

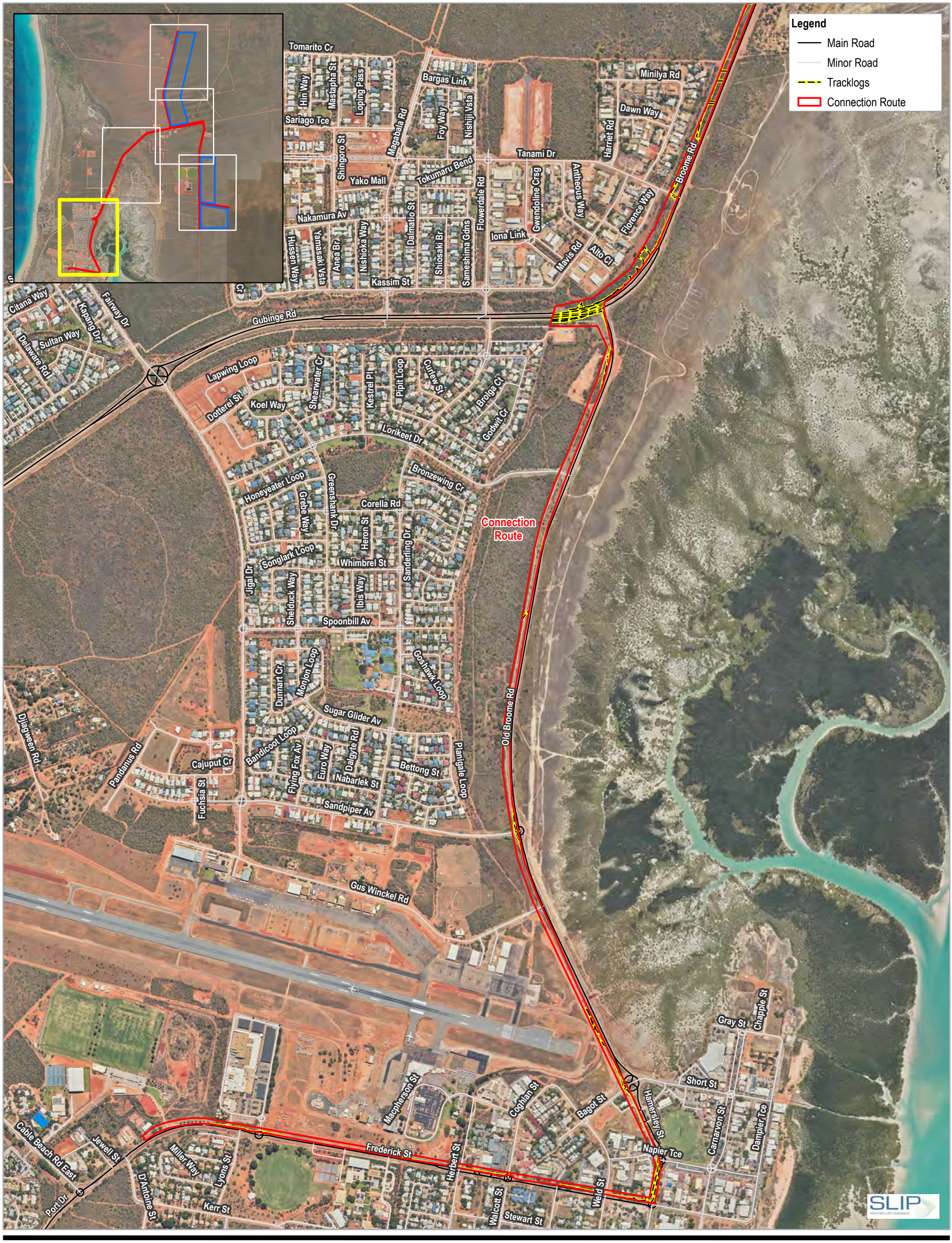
**Survey Effort - Broome**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**


**FIGURE 15**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_015_SurveyEffort_Broome_Rev0
Print date: 10 Jul 2024 - 15:06

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:11,000

0 100 200 300 400
Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

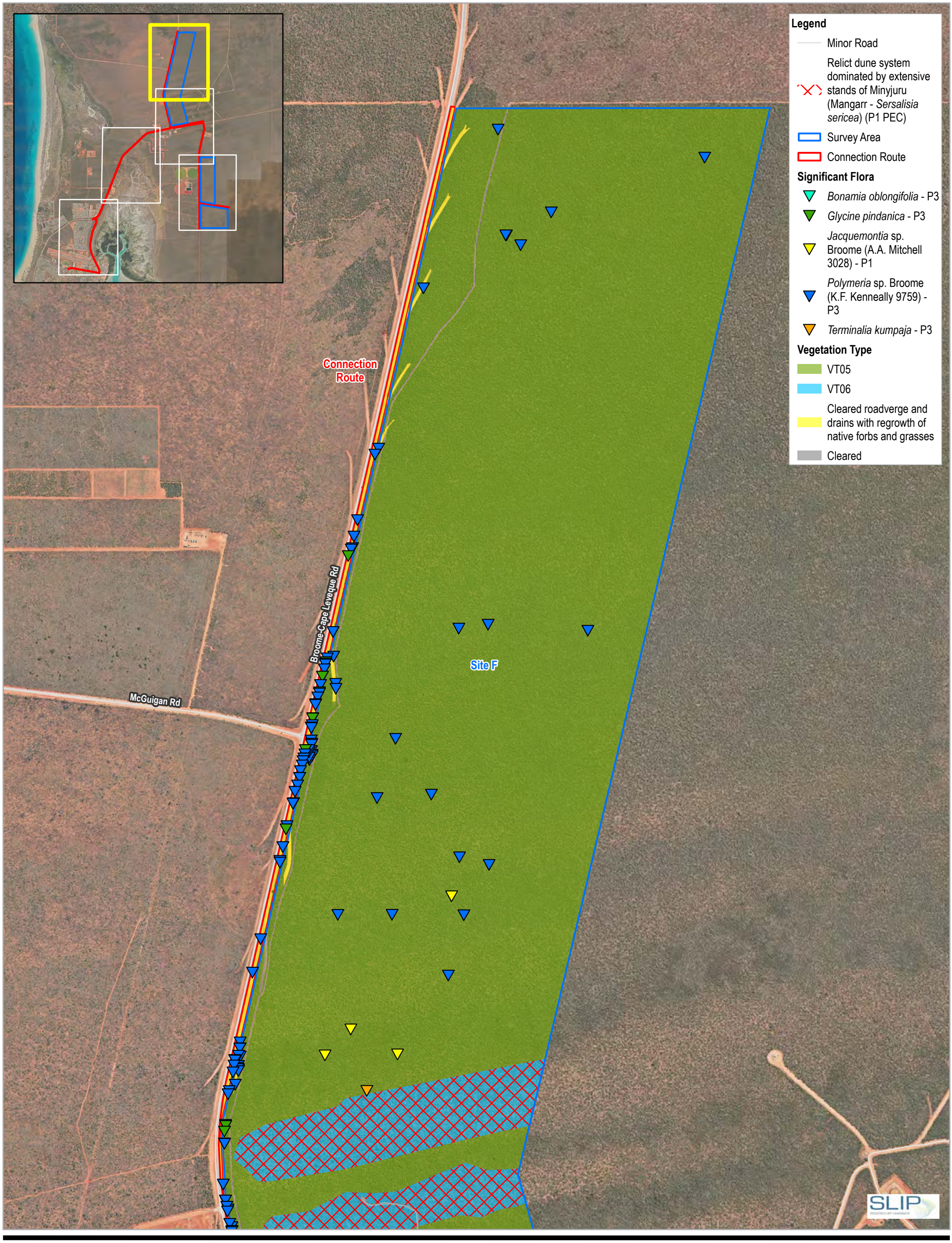
**Survey Effort - Broome**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**

Page 5 of 5
**FIGURE 15**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_015_SurveyEffort_Broome_Rev0
Print date: 10 Jul 2024 - 15:03

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:11,000

0 100 200 300 400

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

**Vegetation Types and Significant Flora and Communities - Broome**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**

Page 1 of 5
**FIGURE 16**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_016_VegTypesSigFlora&Communities_Broome_Rev0
Print date: 10 Jul 2024 - 15:43

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez

**Legend**

- Main Road
- Minor Road
- Relict dune system dominated by extensive stands of Minyjuru (Mangarr - *Sersalisia sericea*) (P1 PEC)
- Survey Area
- Connection Route

**Significant Flora**

- *Bonamia oblongifolia* - P3
- *Glycine pindanica* - P3
- *Jacquemontia* sp. Broome (A.A. Mitchell 3028) - P1
- *Polymeria* sp. Broome (K.F. Kenneally 9759) - P3
- *Terminalia kumpaja* - P3

**Vegetation Type**

- VT05
- VT06
- Cleared roadverge and drains with regrowth of native forbs and grasses
- Rehabilitation
- Cleared

Site F

Site G

Broome-Cape Leveque Rd

Broome Rd

Connection Route

Katsuyama Rd

Warrgamburu Dr

Crab Creek Rd

SLIP

Paper Size ISO A3
at Scale: 1:11,000

0 100 200 300 400

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

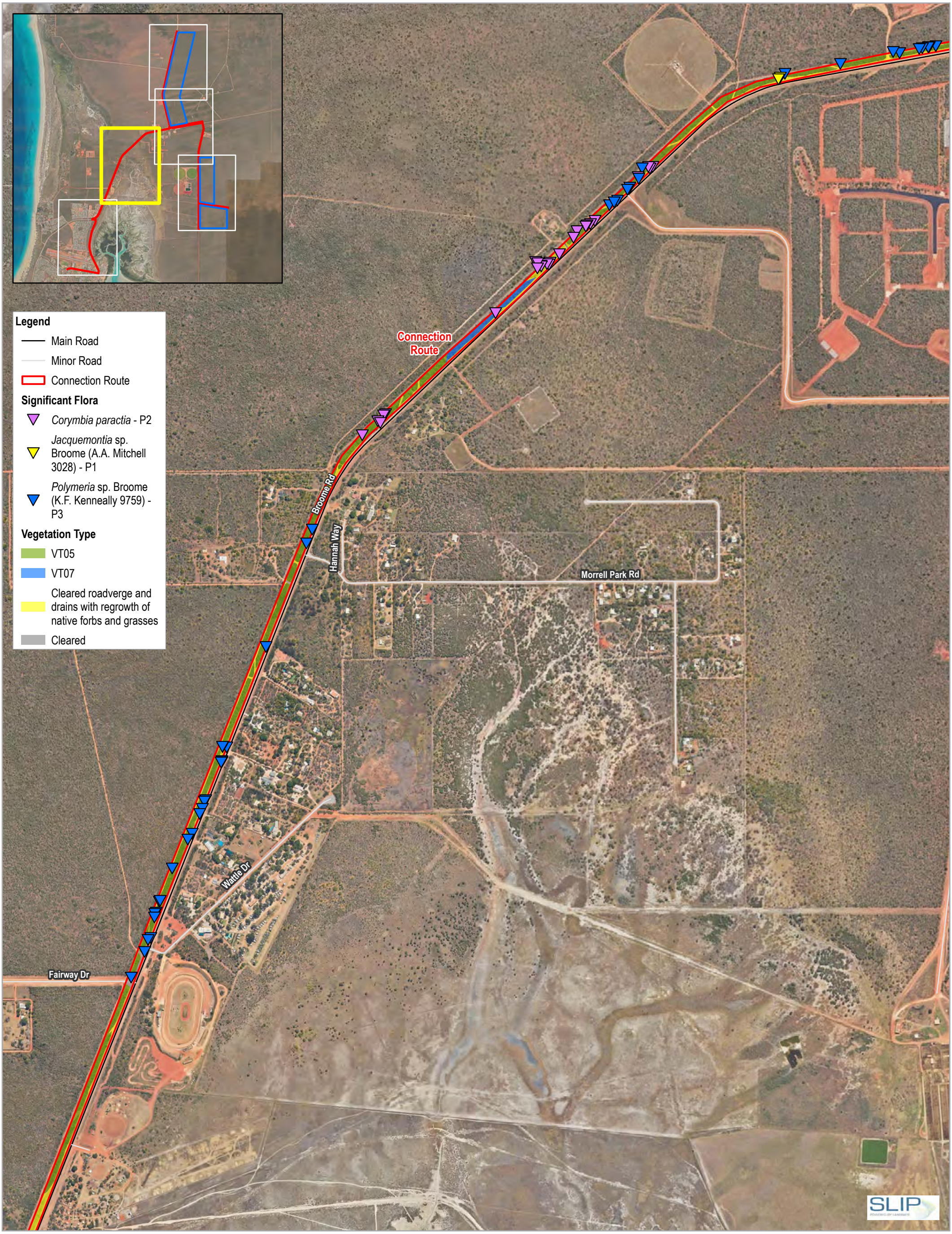
**Vegetation Types and Significant Flora and Communities - Broome**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**



\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_016_VegTypesSigFlora&Communities_Broome_Rev0
Print date: 10 Jul 2024 - 15:47

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:11,000

0 100 200 300 400

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

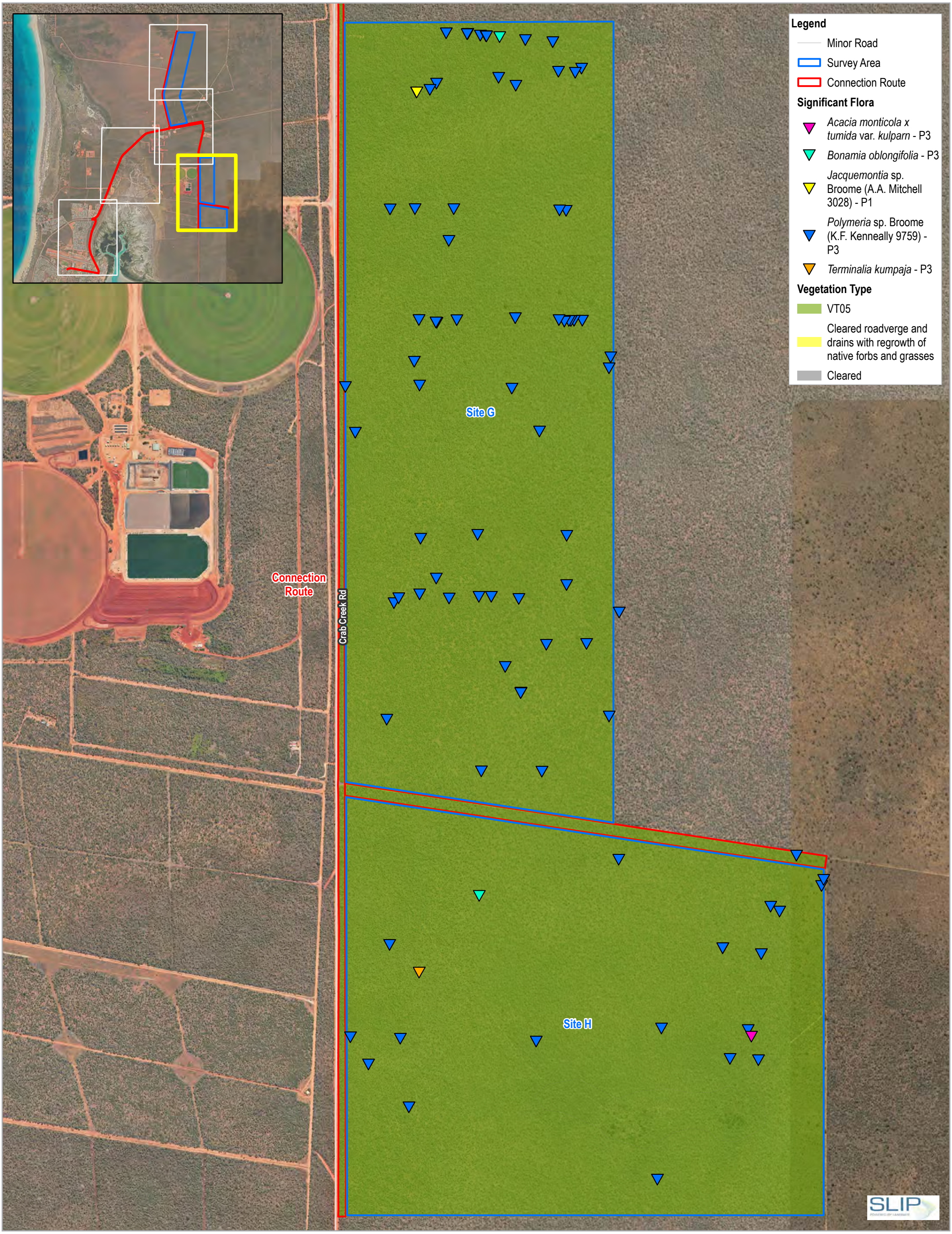
**Vegetation Types and Significant Flora and Communities - Broome**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**


**FIGURE 16**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_016_VegTypesSigFlora&Communities_Broome_Rev0
Print date: 10 Jul 2024 - 15:49

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:11,000

0 100 200 300 400
Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

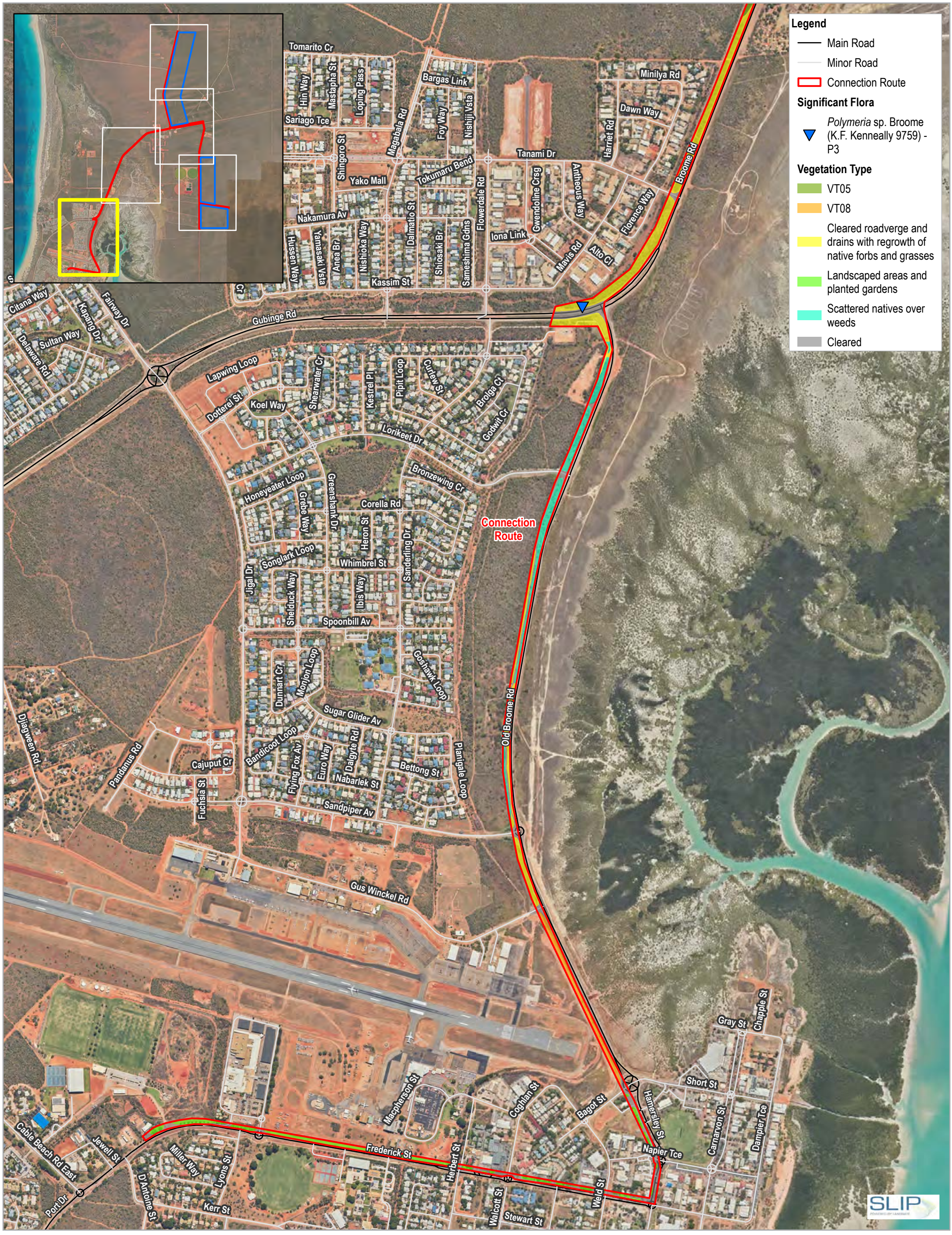
**Vegetation Types and Significant Flora and Communities - Broome**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**


**FIGURE 16**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_016_VegTypesSigFlora&Communities_Broome_Rev0
Print date: 10 Jul 2024 - 15:38

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:11,000

0 100 200 300 400

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

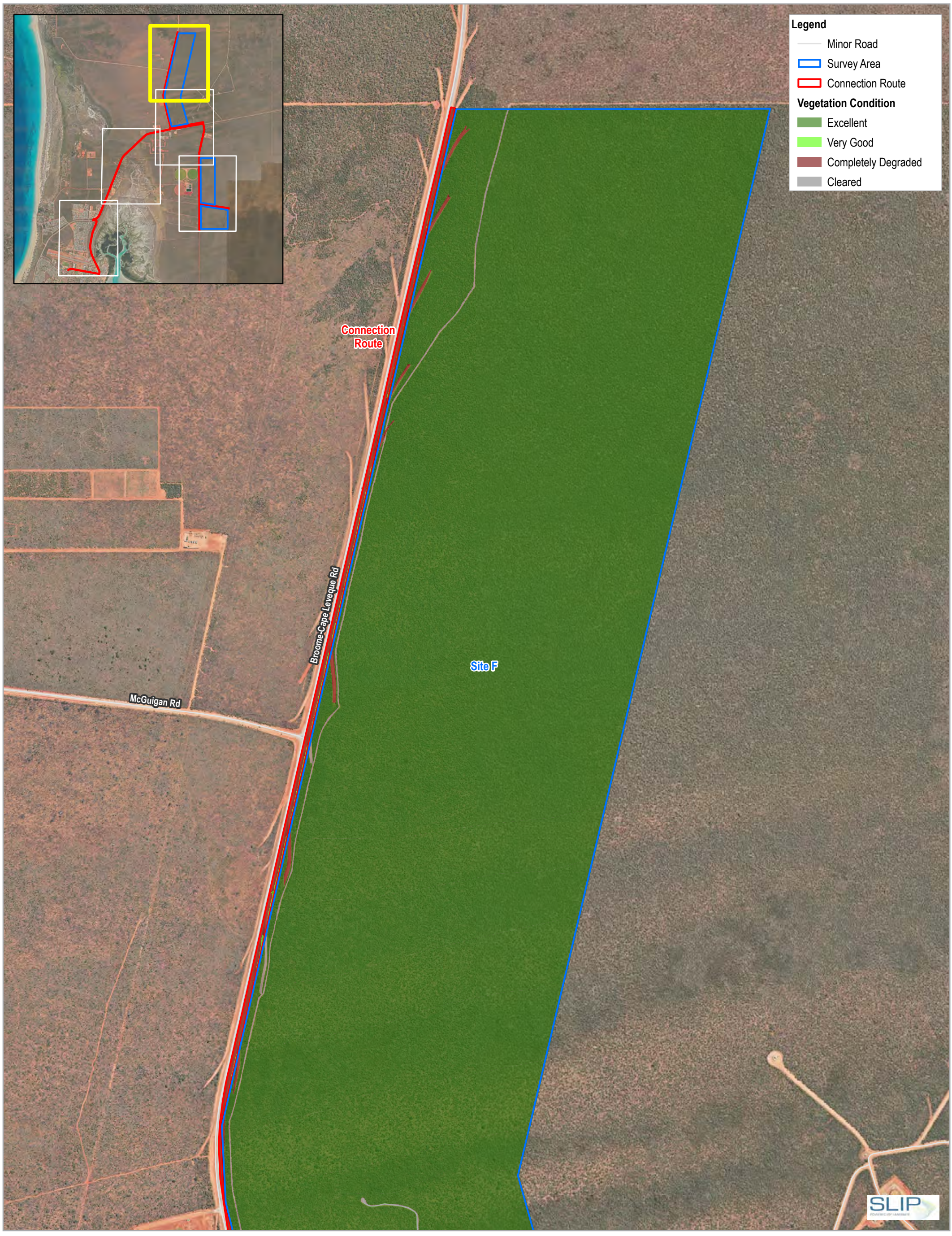
**Vegetation Types and Significant Flora and Communities - Broome**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**

Page 5 of 5
**FIGURE 16**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_016_VegTypesSigFlora&Communities_Broome_Rev0
Print date: 10 Jul 2024 - 15:40

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
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0 100 200 300 400

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

**Vegetation Condition - Broome**

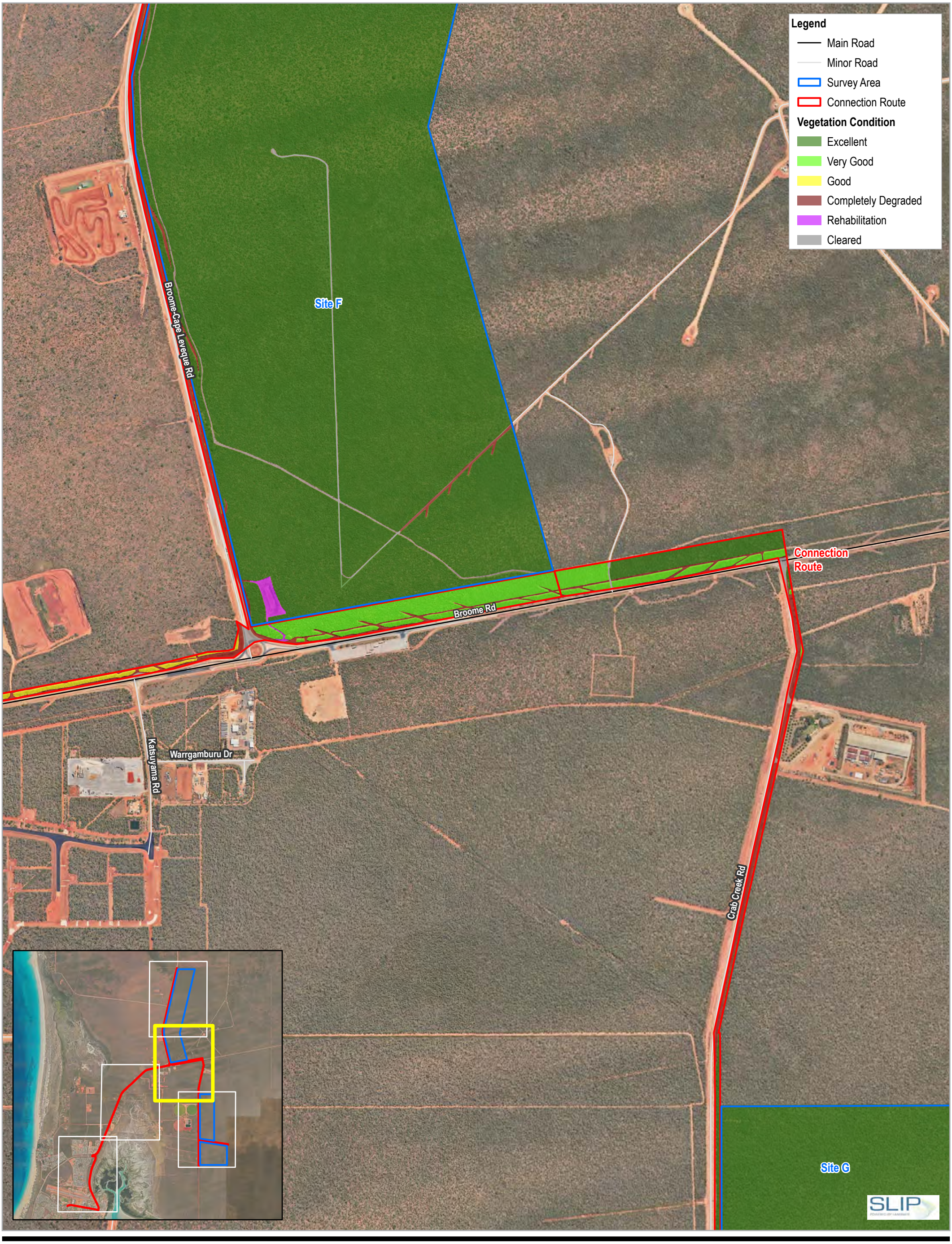
Project No. **12621719**
Revision No. **0**
Date **10/07/2024**



**FIGURE 17**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_017_VegCondition_Broome_Rev0
Print date: 10 Jul 2024 - 15:58

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:11,000

0 100 200 300 400

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

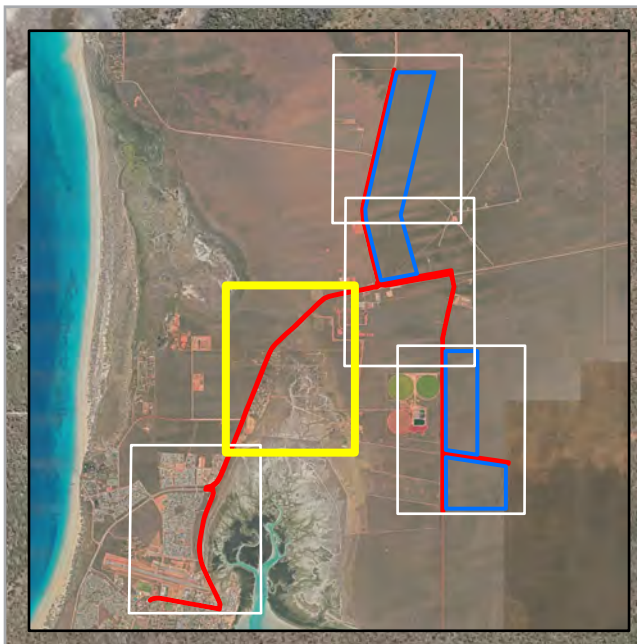
**Vegetation Condition - Broome**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**


**FIGURE 17**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_017_VegCondition_Broome_Rev0
Print date: 10 Jul 2024 - 16:07

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez



**Legend**

- Main Road
- Minor Road
- Connection Route

**Vegetation Condition**

- Good
- Degraded
- Completely Degraded
- Cleared

Connection Route

Broome Rd

Hannah Way

Morrell Park Rd

Wattle Dr

Fairway Dr

SLIP

Paper Size ISO A3
at Scale: 1:11,000

0 100 200 300 400

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

**Vegetation Condition - Broome**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**



**FIGURE 17**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_017_VegCondition_Broome_Rev0
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Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:11,000

0 100 200 300 400

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

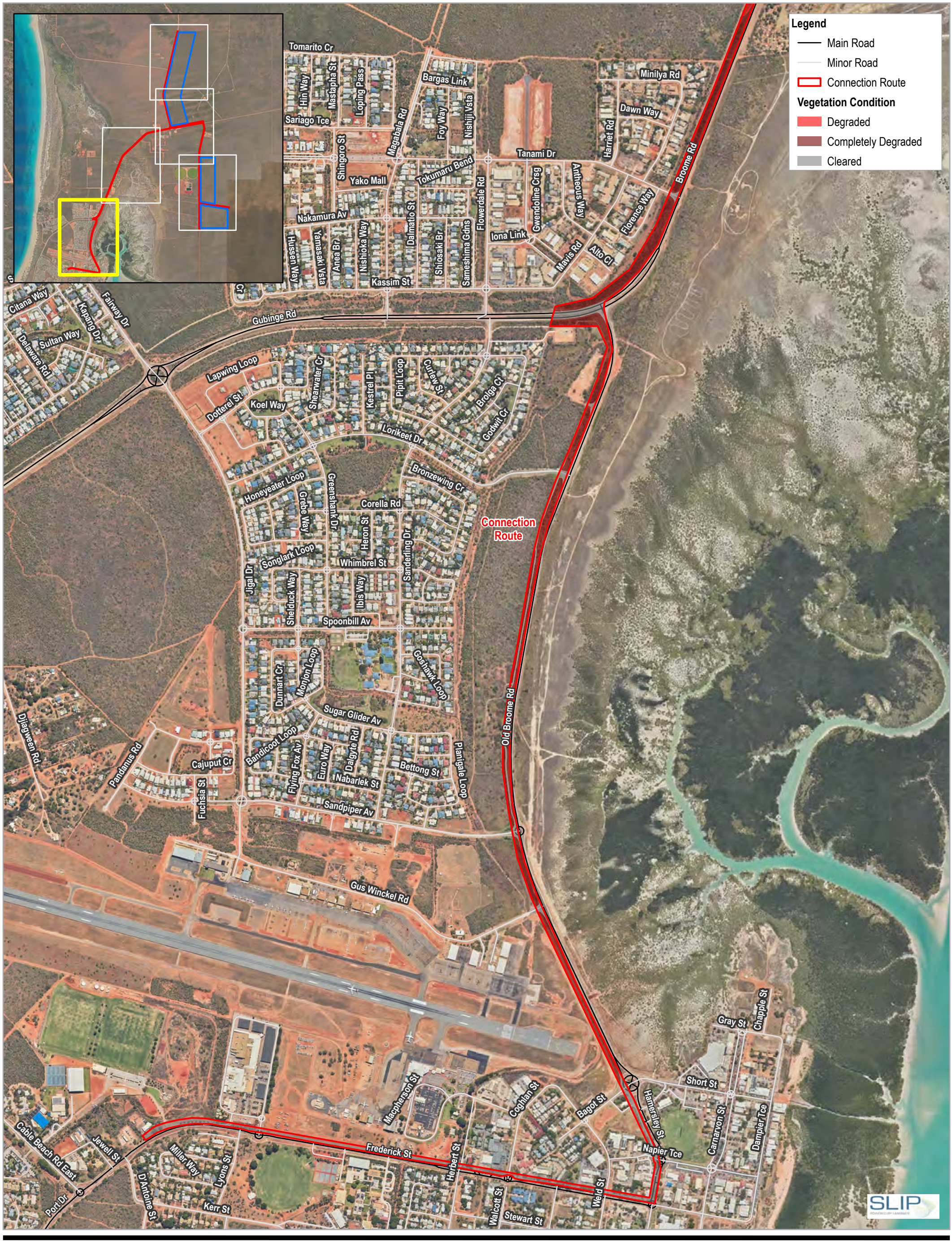
**Vegetation Condition - Broome**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**


**FIGURE 17**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_017_VegCondition_Broome_Rev0
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Paper Size ISO A3
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0 100 200 300 400

Meters

Map Projection: Transverse Mercator
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Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

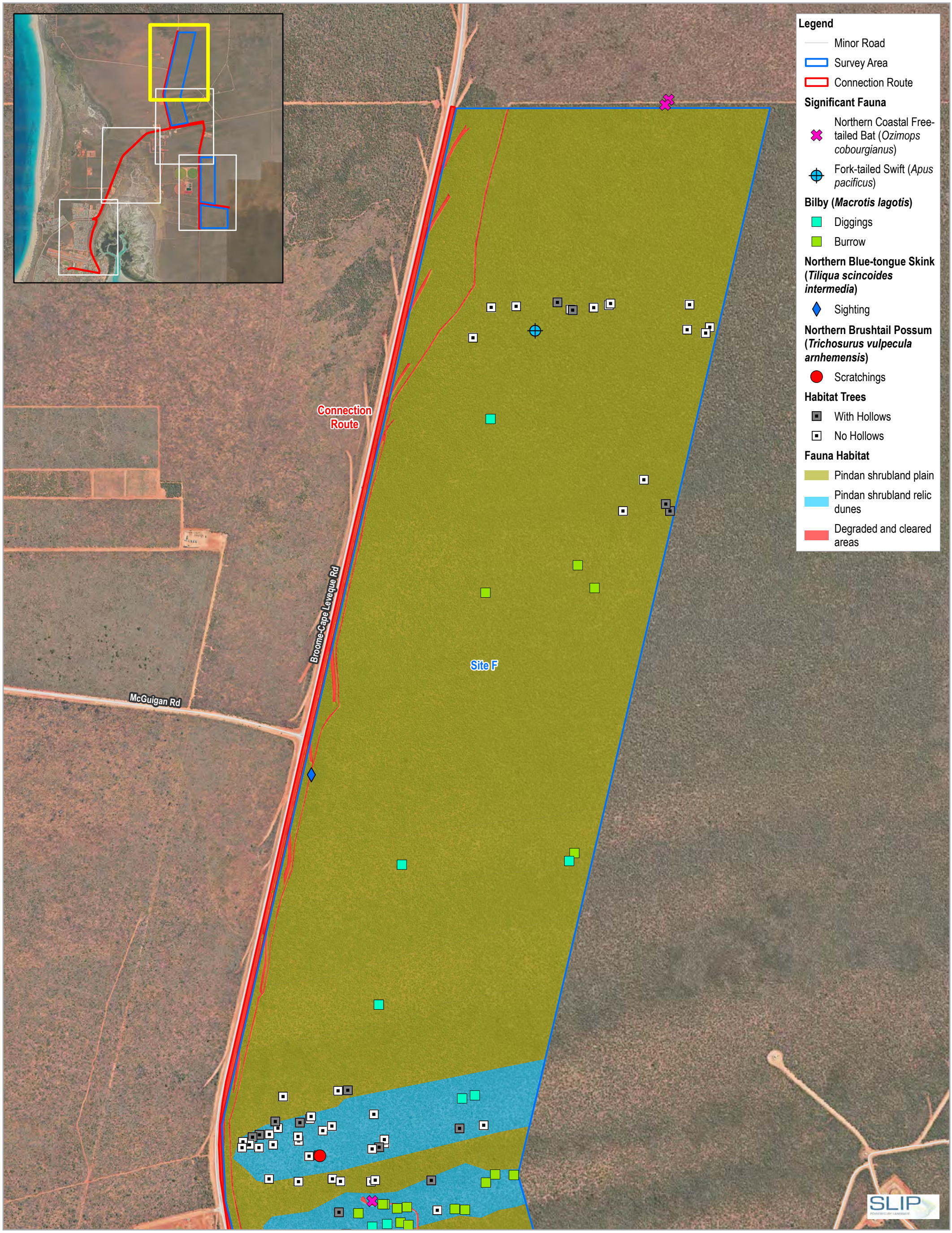
**Vegetation Condition - Broome**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**

Page 5 of 5
**FIGURE 17**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_017_VegCondition_Broome_Rev0
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Paper Size ISO A3
at Scale: 1:11,000

0 100 200 300 400

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

**Fauna Habitat and Significant Fauna - Broome**

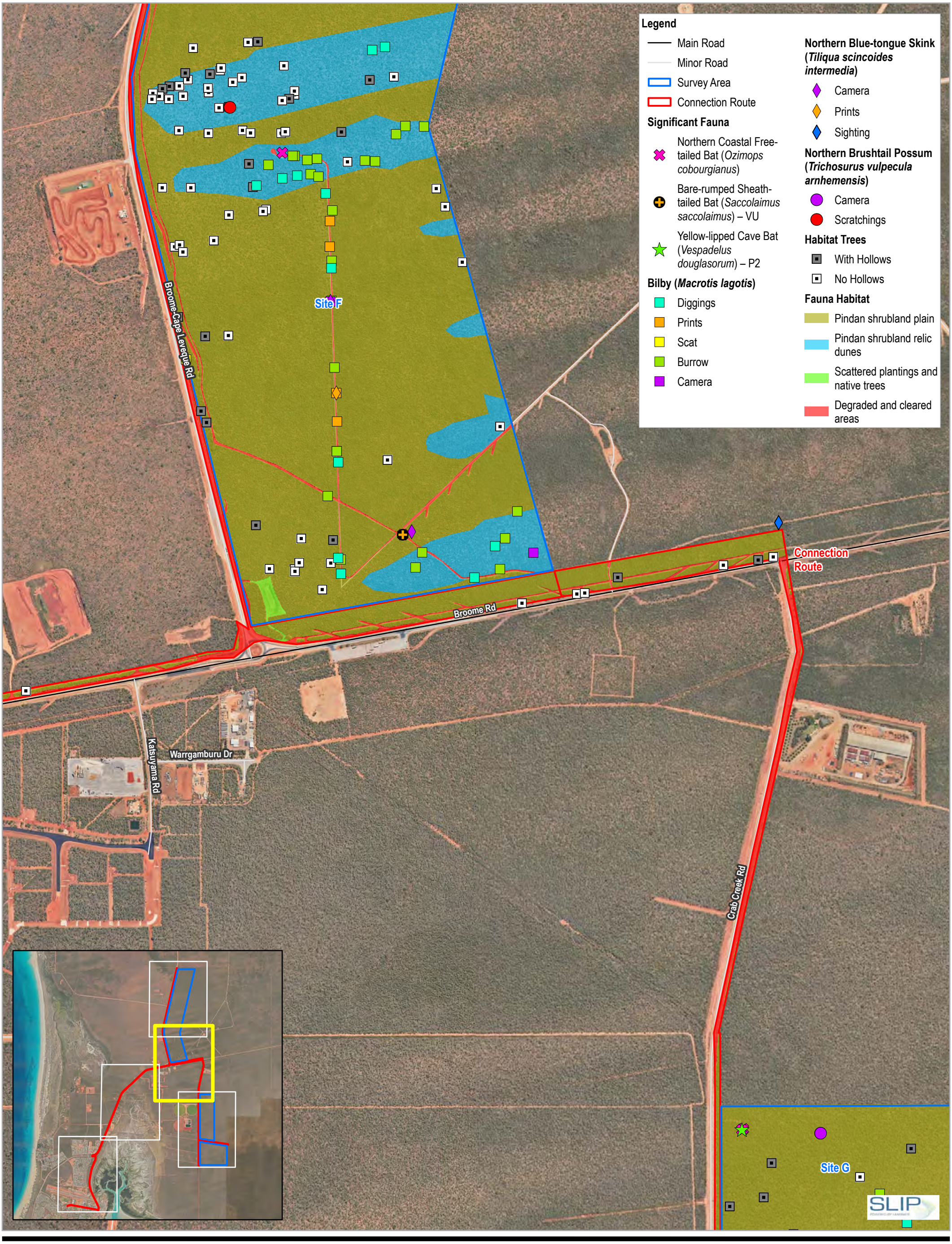
Project No. **12621719**
Revision No. **0**
Date **10/07/2024**



**FIGURE 18**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_018_FaunaHabitat&SigFauna_Broome_Rev0
Print date: 10 Jul 2024 - 16:19

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:11,000

0 100 200 300 400
Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

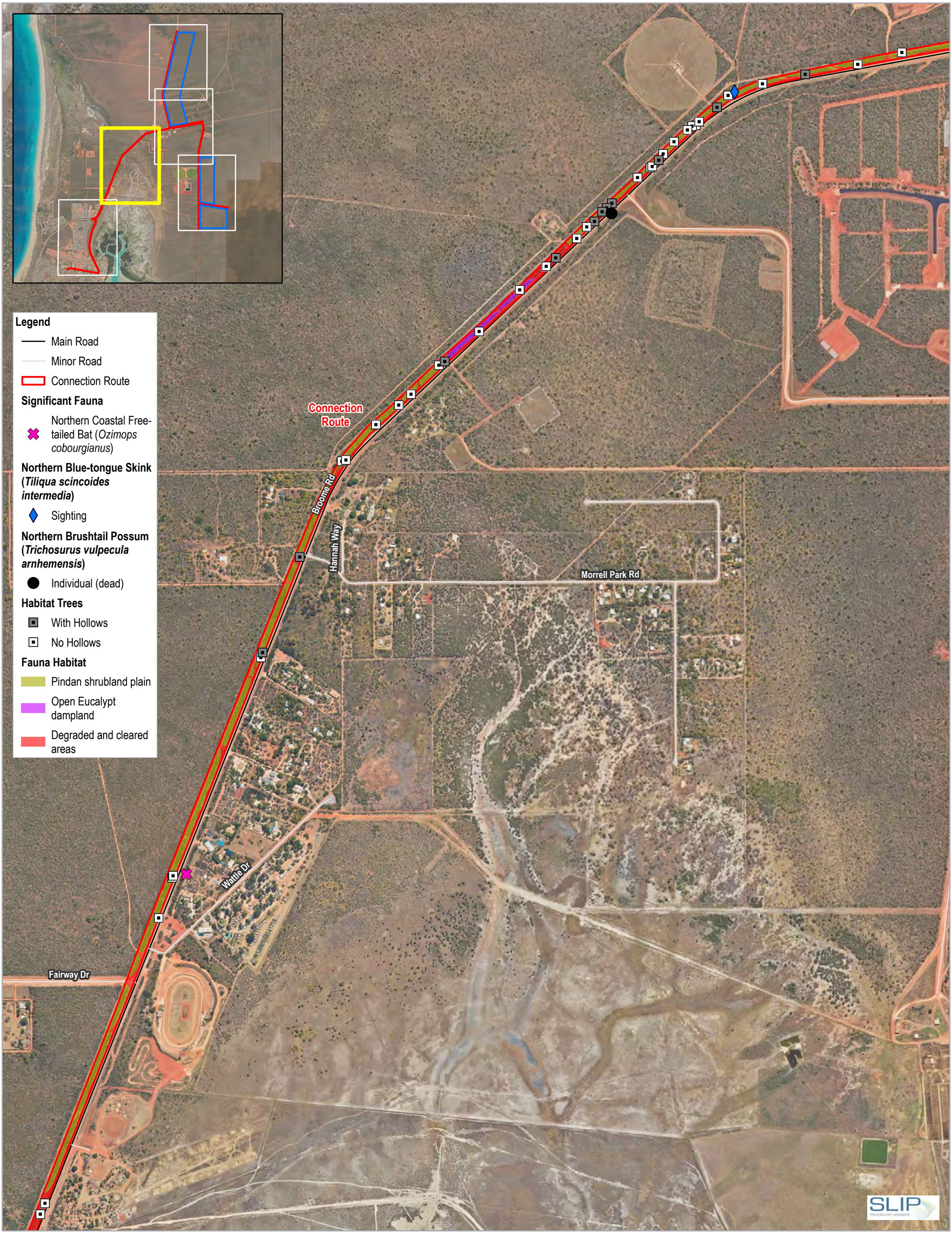
**Fauna Habitat and Significant Fauna - Broome**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**


**FIGURE 18**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_018_FaunaHabitat&SigFauna_Broome_Rev0
Print date: 10 Jul 2024 - 16:32

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:11,000

0 100 200 300 400

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

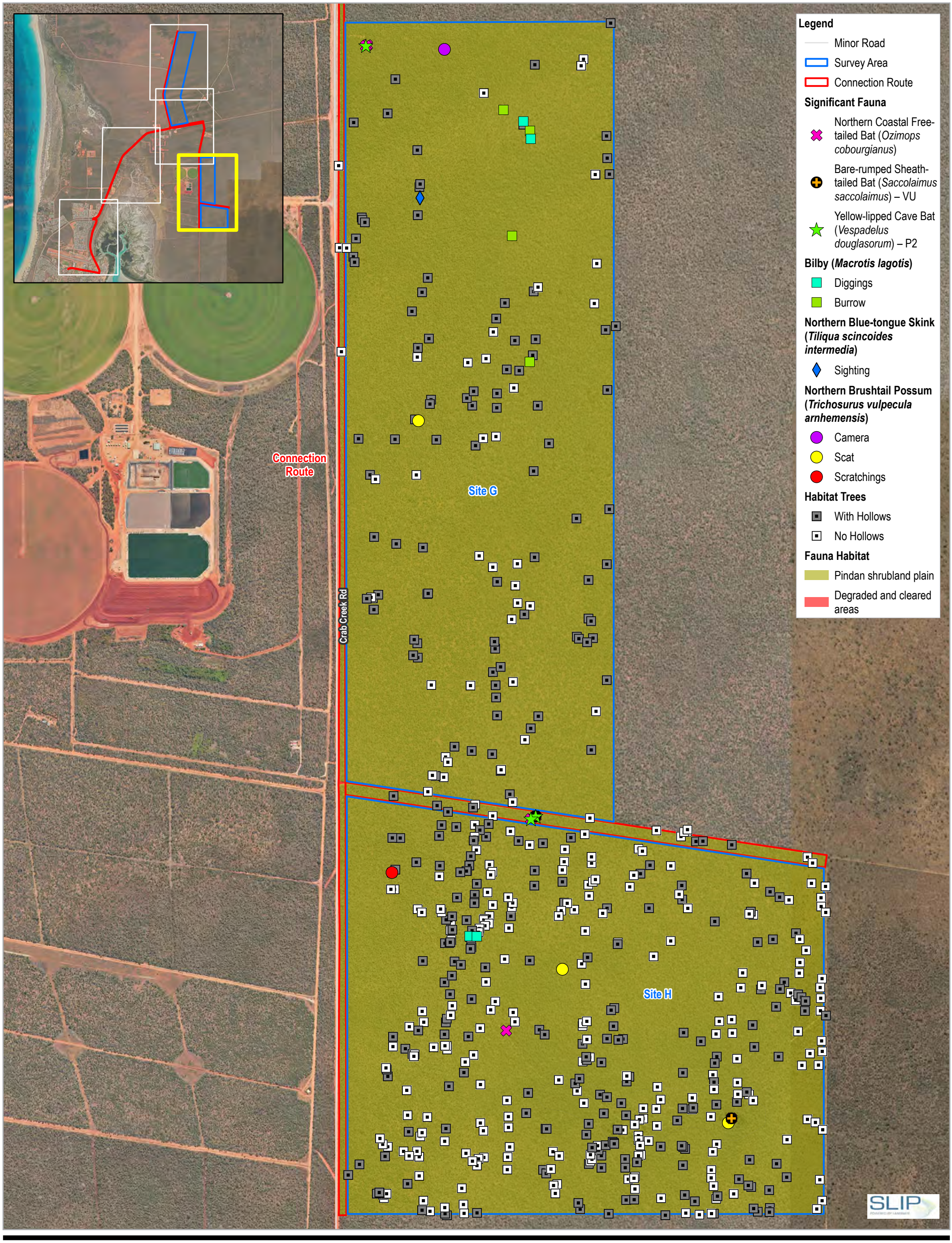
**Fauna Habitat and Significant Fauna - Broome**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**


**FIGURE 18**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_018_FaunaHabitat&SigFauna_Broome_Rev0
Print date: 10 Jul 2024 - 16:21

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:11,000

0 100 200 300 400

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

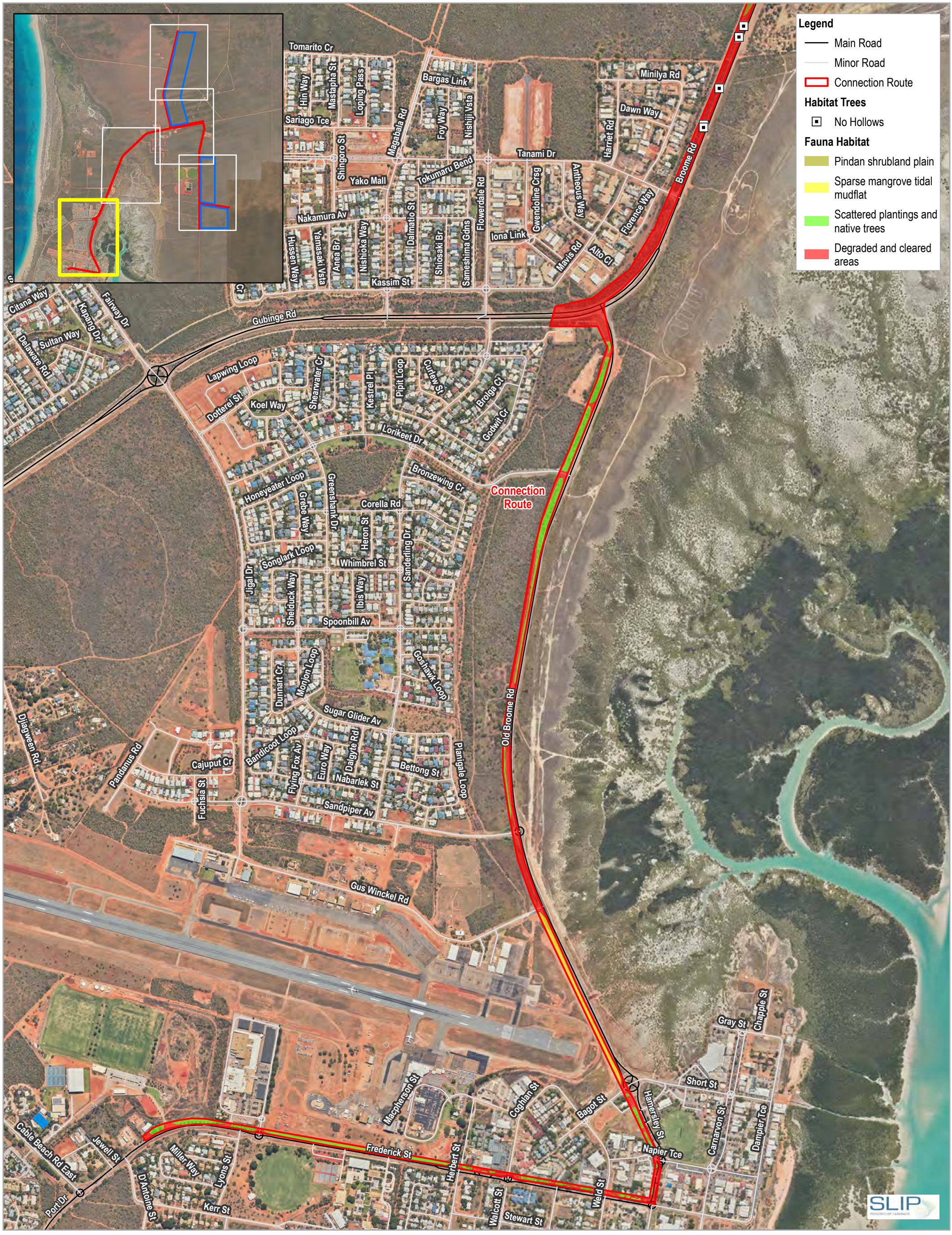
**Fauna Habitat and Significant Fauna - Broome**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**


**FIGURE 18**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_018_FaunaHabitat&SigFauna_Broome_Rev0
Print date: 10 Jul 2024 - 16:12

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:11,000

0 100 200 300 400
Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 51

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

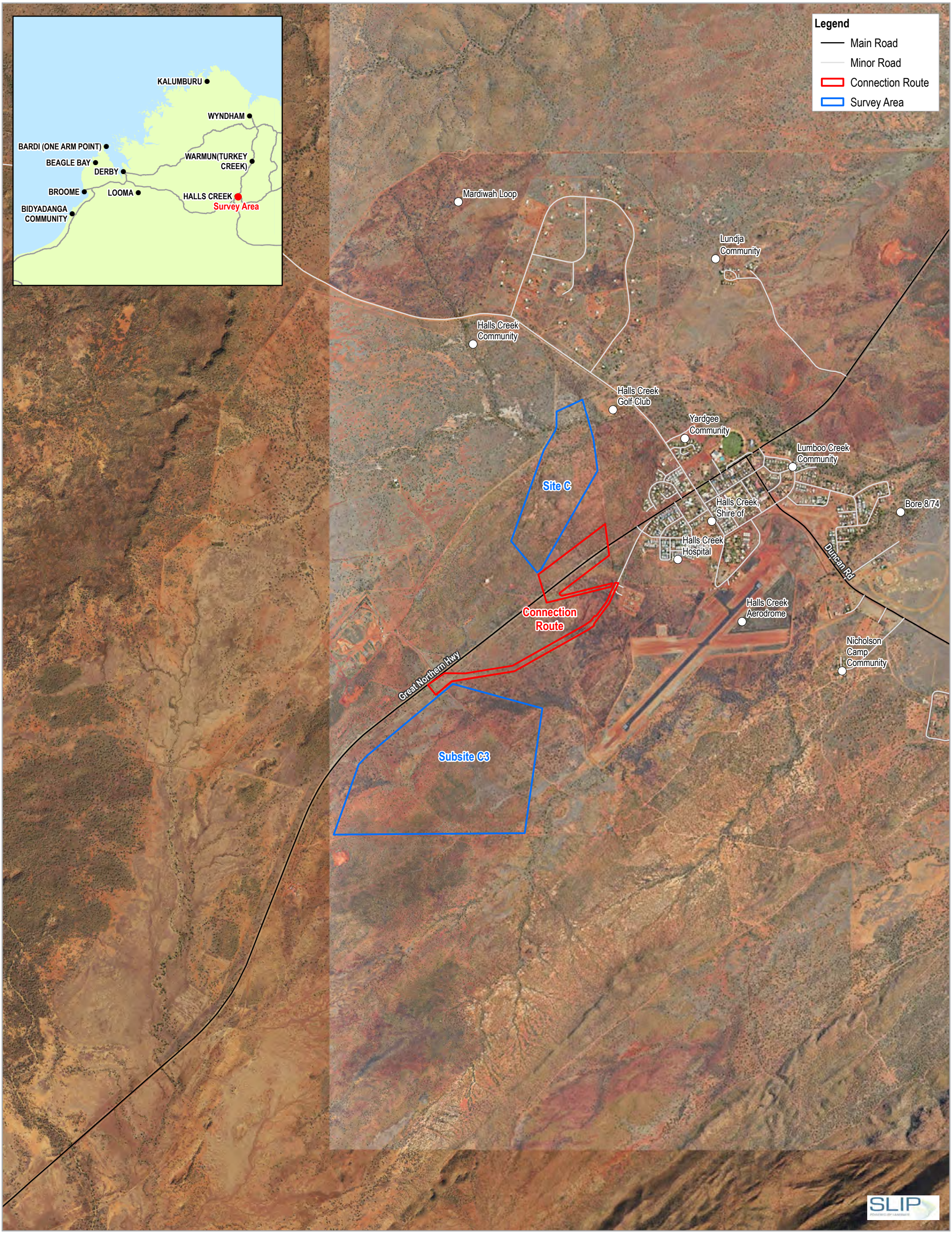
**Fauna Habitat and Significant Fauna - Broome**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**

Page 5 of 5
**FIGURE 18**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_018_FaunaHabitat&SigFauna_Broome_Rev0
Print date: 10 Jul 2024 - 16:15

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:25,000

0 300 600 900 1,200 Meters

N

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 52

GHD

**Horizon Power**
**Kimberley Biological Survey**

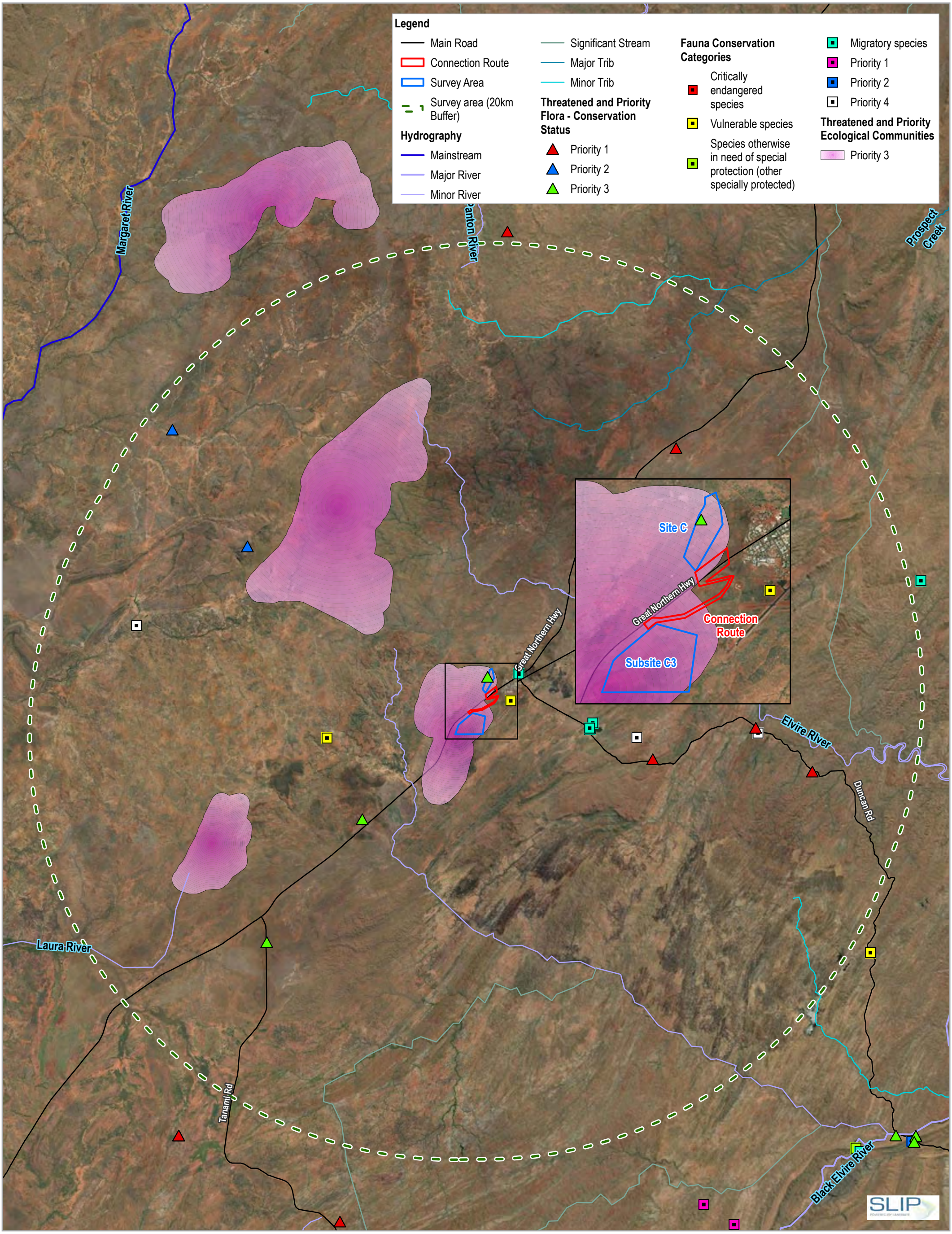
**Location - Halls Creek**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**

**FIGURE 19**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_019_Location_HallsCreek_Rev0
Print date: 10 Jul 2024 - 13:47

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:160,000

0 1.5 3 4.5 6
Kilometers

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 52

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

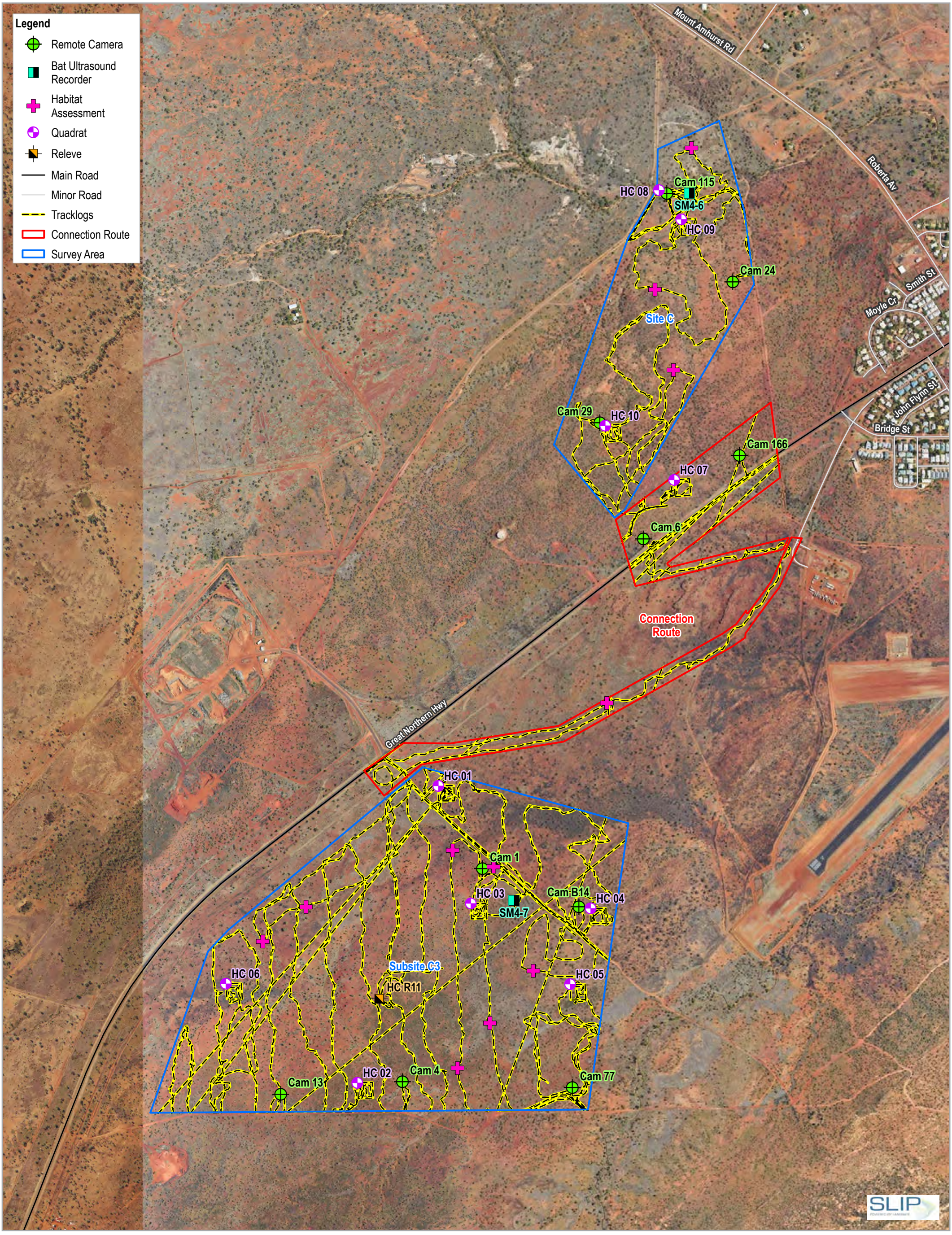
**Environmental Constraints - Halls Creek**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**

**FIGURE 20**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_020_EnvironmentalConstraints_HallsCreek_Rev0
Print date: 10 Jul 2024 - 13:48

Data source: World Imagery: Earthstar Geographics
World Imagery: Maxar. Created by: klabez




Paper Size ISO A3
at Scale: 1:11,000

0 100 200 300 400

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 52

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

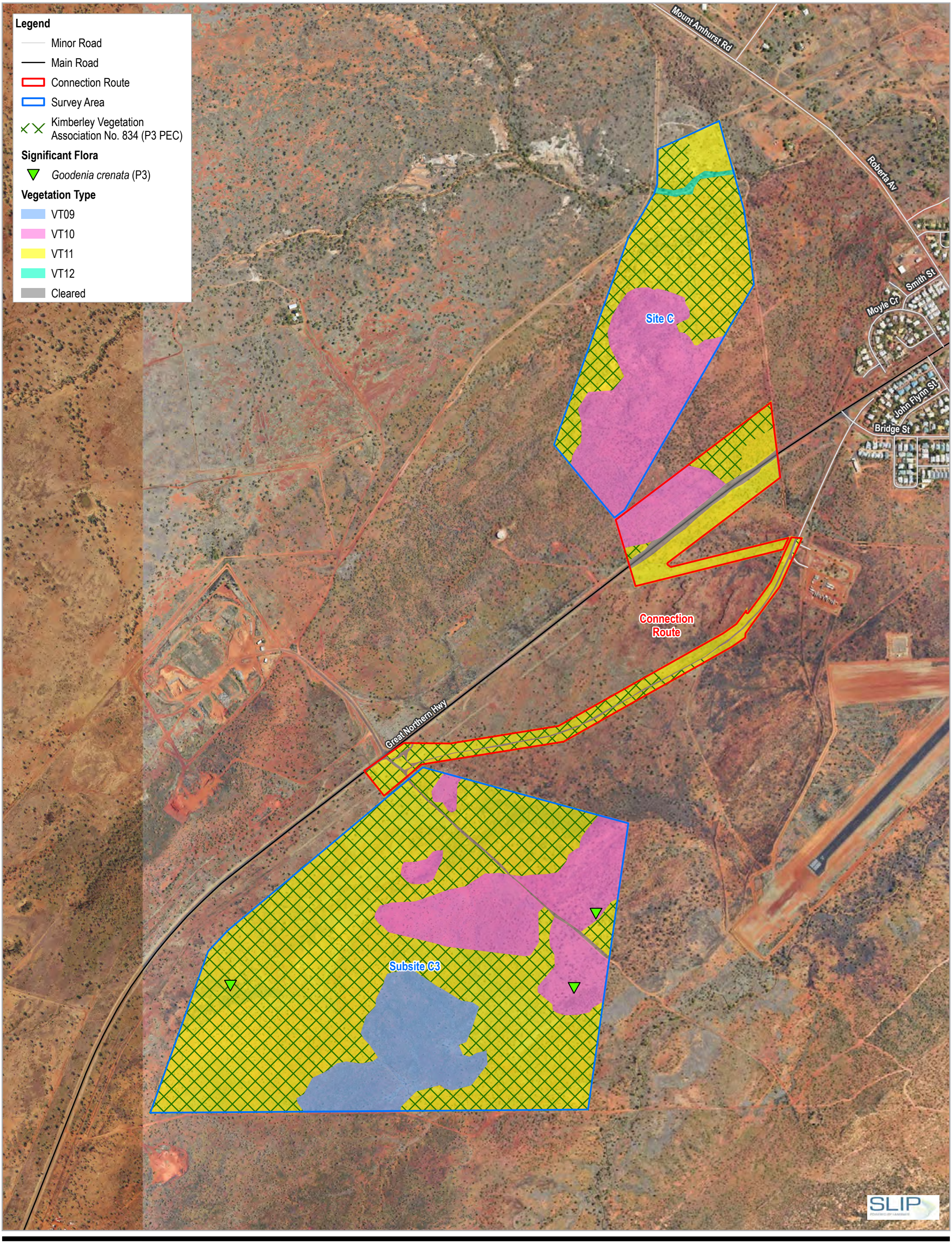
**Survey Effort – Halls Creek**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**

**FIGURE 21**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_021_SurveyEffort_HallsCreek_Rev0
Print date: 10 Jul 2024 - 13:49

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:11,000

0 100 200 300 400

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 52

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

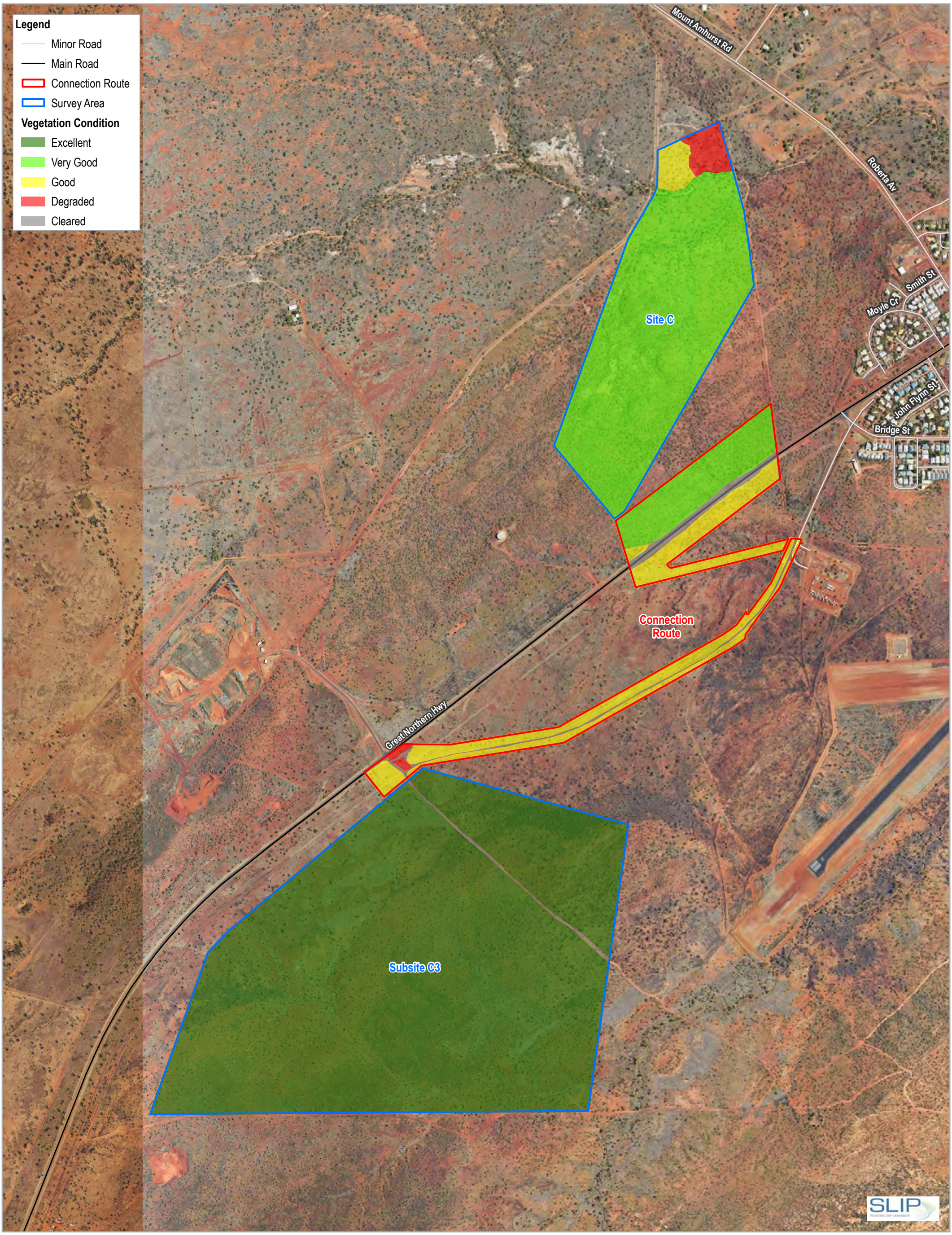
**Vegetation Types and Significant Flora and Communities – Halls Creek**

Project No. **12621719**
Revision No. **1**
Date **18/07/2024**

**FIGURE 22**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_022_VegTypesSigFlora&Communities_HallsCreek_Rev1
Print date: 18 Jul 2024 - 07:23

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez




Paper Size ISO A3
at Scale: 1:11,000

0 100 200 300 400

Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 52

N

**Horizon Power**
**Kimberley Biological Survey**

**Vegetation Condition – Halls Creek**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**

**FIGURE 23**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_023_VegCondition_HallsCreek_Rev0
Print date: 10 Jul 2024 - 13:52

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez

**Legend**

- Minor Road
- Main Road
- Connection Route
- Survey Area

**Significant Fauna**

- Gouldian Finch (*Chloebia gouldiae*) – EN
- Northern Coastal Free-tailed Bat (*Ozimops cobourgianus*) – P1
- Yellow-lipped Cave Bat (*Vespadelus douglasorum*) – P2

**Fauna Habitat**

- Open Eucalypt woodland clay plain
- Acacia shrubland thicket
- Minor drainage line
- Rocky hills and slopes
- Cleared

Mount Amhurst Rd
Roberta Av
Smith St
Moyle Cr
John Flynn St
Bridge St
Site C
Connection Route
Great Northern Hwy
Subsite C3
SLIP

Paper Size ISO A3
at Scale: 1:11,000

0 100 200 300 400
Meters

Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 52

N

GHD

**Horizon Power**
**Kimberley Biological Survey**

**Fauna Habitat and Significant Fauna – Halls Creek**

Project No. **12621719**
Revision No. **0**
Date **10/07/2024**

**FIGURE 24**

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_024_FaunaHabitat&SigFauna_HallsCreek_Rev0
Print date: 10 Jul 2024 - 13:52

Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez

# Appendix B

## Relevant legislation, background information and conservation codes

# Relevant legislation

## Federal *Environment Protection and Biodiversity Conservation Act 1999*

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) is the Federal Government's central piece of environmental legislation. It provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places, which are defined in the EPBC Act as Matters of National Environmental Significance (MNES).

The biological aspects listed as MNES include:

– Nationally threatened flora and fauna species and ecological communities
– Migratory species

A person must not undertake an action that has, will have, or is likely to have a significant impact (direct or indirect) on MNES, without approval from the Federal Minister for the Environment.

The EPBC Act is administered by the Department of Climate Change, Energy, the Environment and Water (DCCEEW).

## State *Environmental Protection Act 1986*

The *Environmental Protection Act 1986* (EP Act) is the primary legislative Act dealing with the protection of the environment in Western Australia. The Act allows the Environmental Protection Authority (EPA), to prevent, control and abate pollution and environmental harm, for the conservation, preservation, protection, enhancement and management of the environment and for matters incidental to or connected with the foregoing. Part IV of the EP Act is administered by the EPA and makes provisions for the EPA to undertake environmental impact assessment of significant proposals, strategic proposals and land use planning schemes.

The Department of Water and Environment Regulation (DWER) is responsible for administering the clearing provisions of the EP Act (Part V). Clearing of native vegetation in Western Australia requires a permit from the DWER, unless exemptions apply. Applications for clearing permits are assessed by the Department and decisions are made to grant or refuse the application in accordance with the Act. When making a decision the assessment considers clearing against the ten clearing principles as specified in Schedule 5 of the EP Act:

1. Native vegetation should not be cleared if it comprises a high level of biodiversity.
2. Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a significance habitat for fauna indigenous to Western Australia.
3. Native vegetation should not be cleared if it includes, or is necessary, for the continued existence of rare flora.
4. Native vegetation should not be cleared if it comprises the whole or part of native vegetation in an area that has been extensively cleared.
5. Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.
6. Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.
7. Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.
8. Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.
9. Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

10. Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding.

Exemptions for clearing include clearing that is a requirement of a written law or authorised under certain statutory processes (listed in Schedule 6 of the EP Act) and exemptions for prescribed low impact day-to-day activities (prescribed in the Environmental Protection (Clearing of Native Vegetation) Regulations 2004); these exemptions do not apply in environmentally sensitive areas (ESAs).

# State *Biodiversity and Conservation Act 2016*

The *Biodiversity Conservation Act 2016* (BC Act) provides for the conservation and protection of biodiversity and biodiversity components, as well as the promotion of the ecologically sustainable use of biodiversity components in Western Australia. The BC Act replaces both the repealed *Wildlife Conservation Act 1950* (WC Act) and the *Sandalwood Act 1929* (Sandalwood Act), as well as their associated regulations. To attain the objectives of the BC Act, principles of ecological sustainable development have been established:

– Decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations
– If there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation
– The present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations
– The conservation of biodiversity and ecological integrity should be a fundamental consideration indecision-making
– Improved valuation, pricing and incentive mechanisms should be promoted.

The BC Act is administered by the Department of Biodiversity Conservation and Attractions (DBCA).

# State *Biosecurity and Agriculture Management Act 2007*

The *Biosecurity and Agriculture Management Act 2007* (BAM Act) and associated regulations are administered by the Department of Primary Industries and Regional Development (DPIRD) and replace the repealed *Agriculture and Related Resources Protection Act 1976.* The main purposes of the BAM Act and its regulations are to:

– Prevent new animal and plant pests (vermin and weeds) and diseases from entering WA
– Manage the impact and spread of those pests already present in the state
– Safely manage the use of agricultural and veterinary chemicals
– Increased control over the sale of agricultural products that contain violative chemical residues.

The Western Australian Organism List (WAOL) provides the status of organisms which have been categorised under the BAM Act. A Declared Pest is a prohibited organism or an organism for which a declaration under Section 22(2) of the Act is in force. Declared Pests may be assigned a control category including: C1 (exclusion), C2 (eradication) and C3 (management). The category may apply to the whole of the State, LGAs, districts, individual properties or even paddocks, and all landholders are obliged to comply with the specific category of control. Categories of control are defined below.

*DPIRD Categories for Declared Pests under the BAM Act*

| Control class code | Description |
|---|---|
| C1 (Exclusion) | Pests will be assigned to this category if they are not established in Western Australia and control measures are to be taken, including border checks, in order to prevent them entering and establishing in the State. |
| C2 (Eradication) | Pests will be assigned to this category if they are present in Western Australia in low enough numbers or in sufficiently limited areas that their eradication is still a possibility. |
| C3 (Management) | Pests will be assigned to this category if they are established in Western Australia but it is feasible, or desirable, to manage them in order to limit their damage. Control measures can prevent a C3 pest from increasing in population size or density or moving from an area in which it is established into an area which currently is free of that pest. |

# Background information

## Environmentally Sensitive Areas

Environmentally Sensitive Areas (ESAs) are declared by the Minister for Environment under Section 51B of the EP Act. The Table below outlines the aspects of areas declared as ESA in the Environmental Protection (Environmentally Sensitive Areas) Notice 2005.

***Aspects of ESAs***

| Aspects of Environmentally Sensitive Areas |
|---|
| A declared World Heritage property as defined in Section 13 of the EPBC Act. |
| An area that is included on the Register of the National Estate (RNE), because of its natural values, under the *Australian Heritage Commission Act 1975* of the Commonwealth (the RNE was closed in 2007 and is no longer a statutory list – all references to the RNE were removed from the EPBC Act on 19 February 2012). |
| A defined wetland and the area within 50 m of the wetland. Defined wetlands include Ramsar wetlands, conservation category wetlands and nationally important wetlands. |
| The area covered by vegetation within 50 m of rare flora, to the extent to which the vegetation is continuous with the vegetation in which the rare flora is located. |
| The area covered by a Threatened Ecological Community. |
| A Bush Forever Site listed in "Bush Forever" Volumes 1 and 2 (2000), published by the Western Australia Planning Commission, except to the extent to which the site is approved to be developed by the Western Australia Planning Commission. |
| The areas covered by the *Environmental Protection (Gnangara Mound Crown Land) Policy 1992*. |
| The areas covered by the *Environmental Protection (Western Swamp Tortoise Habitat) Policy 2002.* |
| The areas covered by the lakes to which the *Environmental Protection (Swan Coastal Plain Lakes) Policy 1992* (EPP Lakes) applies. |
| Protected wetlands as defined in the *Environmental Protection (South West Agricultural Zone Wetlands) Policy 1998*. |

## Reserves and conservation areas

### Department of Biodiversity, Conservation and Attractions managed lands and waters

DBCA manages lands and waters throughout Western Australia to conserve ecosystems and species, and to provide for recreation and appreciation of the natural environment. DBCA managed lands and waters include national parks, conservation parks and reserves, marine parks and reserves, regional parks, nature reserves, State forest and timber reserves. Access to, or through, some areas of DBCA managed lands may require a permit or could be restricted due to management activities. Proposed land use changes and development proposals that abut DBCA managed lands will generally be referred to DBCA throughout the assessment process.

## Wetlands

### Ramsar Wetlands (Wetlands of International Importance)

The Convention of Wetlands of International Importance was signed in 1971 at the Iranian town of Ramsar. The Convention has since been referred to as the Ramsar Convention. Ramsar Listed wetlands are "sites containing representative, rare or unique wetlands, or wetlands that are important for conserving biological diversity … because of their ecological, botanical, zoological, limnological or hydrological importance" (DAWE 2020b). Once a Ramsar Listed Wetland is designated, the country agrees to manage its conservation and ensure its wise use.

Under the Convention, wise use is broadly defined as “maintaining the ecological character of a wetland” (DAWE 2020b).

## Nationally important wetlands

Wetlands of national significance are listed under the Directory of Important Wetlands in Australia. Nationally important wetlands are wetlands which meet at least one of the following criteria (DAWE 2020a):

– It is a good example of a wetland type occurring within a biogeographic region in Australia
– It is a wetland which plays an important ecological or hydrological role in the natural functioning of a major wetland system/complex
– It is a wetland which is important as the habitat for animal taxa at a vulnerable stage in their life cycles, or provides a refuge when adverse conditions such as drought prevail
– The wetland supports one percent or more of the national populations of any native plant or animal taxa
– The wetland supports native plant or animal taxa or communities which are considered endangered or vulnerable at the national level
– The wetland is of outstanding historical or cultural significance.

# Vegetation extent and status

The National Objectives and Targets for Biodiversity Conservation 2001–2005 (Commonwealth of Australia 2001) recognise that the retention of 30 percent or more of the pre-clearing extent of each ecological community is necessary if Australia’s biological diversity is to be protected. This is the threshold level below which species loss appears to accelerate exponentially and loss below this level should not be permitted. This level of recognition is in keeping with the targets recommended in the review of the National Strategy for the Conservation of Australia’s Biological Diversity (ANZECC 2000).

The extent of remnant native vegetation in WA has been assessed by Shepherd et al. (2002) and the GoWA (2019), based on broadscale vegetation association mapping by Beard (various publications). The GoWA produces Statewide Vegetation Statistics Reports that are used for a number of purposes including conservation planning, land use planning and when assessing development applications. The reports are updated every 2-3 years.

# Vegetation condition

The vegetation condition can be assessed in accordance with the vegetation condition rating scale for the South West and Interzone Botanical Provinces (EPA 2016a). The scale recognises the intactness of vegetation and consists of six rating levels as outlined below.

***Vegetation condition rating and scale for the South West and Interzone Botanical Provinces***

| Condition | South West and Interzone Botanical Provinces description |
|---|---|
| Pristine | Pristine or nearly so, no obvious signs of damage caused by human activities since European settlement. |
| Excellent | Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species. Damage to trees caused by fire, the presence of non-aggressive weeds and occasional vehicle tracks. |
| Very Good | Vegetation structure altered, obvious signs of disturbance. Disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing. |
| Good | Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. Disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing. |
| Degraded | Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. Disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds at high density, partial clearing, dieback and grazing. |

| Condition | South West and Interzone Botanical Provinces description |
|---|---|
| Completely Degraded | The structure of vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as ‘parkland cleared’ with the flora comprising weed or crop species with isolated native trees or shrubs. |

# Conservation codes

Species of significant flora, fauna and communities are protected under both Federal and State Acts. The Federal EPBC Act provides a legal framework to protect and manage nationally important flora and communities. The State BC Act is the primary wildlife conservation legislation in Western Australia. Information on the conservation codes is summarised in the following sections.

# Ecological communities

## Significant communities

Ecological communities are defined as naturally occurring biological assemblages that occur in a particular type of habitat (English and Blyth 1997). Federally listed Threatened Ecological Communities (TECs) are protected under the EPBC Act. The BC Act provides for the Minister to list an ecological community as a TEC (section 27), or as a collapsed ecological community (section 31) statutory listing of State TECs by the Minister. The legislation also describes statutory processes for preparing recovery plans for TECs, the registration of their critical habitat, and penalties for unauthorised modification of TECs.

Possible TECs that do not meet survey criteria are added to the DBCA Priority Ecological Community (PEC) List under Priorities 1, 2 and 3. These are ecological communities that are adequately known; are rare but not threatened, or meet criteria for Near Threatened. PECs that have been recently removed from the threatened list are placed in Priority 4. These ecological communities require regular monitoring. Conservation dependent ecological communities are placed in Priority 5. PECs are not listed under any formal Federal or State legislation, however, may be listed as TECs under the EPBC Act.

***Codes and definitions for TECs listed under the EPBC Act and/or BC Act***

| Categories | Definition |
|---|---|
| **Federal Government Conservation Categories (EPBC Act)** | |
| Critically Endangered (CR) | An ecological community if, at that time, is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria (as outlined in Environment Protection and Biodiversity Conservation Regulations 2000). |
| Endangered (EN) | An ecological community if, at that time:<br>– is not critically endangered; and<br>– is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria (as outlined in Environment Protection and Biodiversity Conservation Regulations 2000). |
| Vulnerable (VU) | An ecological community if, at that time:<br>– is not critically endangered or endangered; and<br>– is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria (as outlined in Environment Protection and Biodiversity Conservation Regulations 2000). |
| **Western Australia Conservation Categories (BC Act)** | |
| <u>Threatened Ecological Communities</u> | |
| Critically Endangered (CR) | An ecological community that has been adequately surveyed and found to have been subject to a major contraction in area and/or that was originally of limited distribution and is facing severe modification or destruction throughout its range in the immediate future, or is already severely degraded throughout its range but capable of being substantially restored or rehabilitated. |
| Endangered (EN) | An ecological community that has been adequately surveyed and found to have been subject to a major contraction in area and/or was originally of limited distribution and is in danger of significant modification throughout its range or severe modification or destruction over most of its range in the near future. |

| Categories | Definition |
|---|---|
| Vulnerable (VU) | An ecological community that has been adequately surveyed and is found to be declining and/or has declined in distribution and/or condition and whose ultimate security has not yet been assured and/or a community that is still widespread but is believed likely to move into a category of higher threat in the near future if threatening processes continue or begin operating throughout its range. |
| Collapsed ecological communities | |
| An ecological community is eligible for listing as a collapsed ecological community at a particular time if, at that time –<br>– there is no reasonable doubt that the last occurrence of the ecological community has collapsed); or<br>– the ecological community has been so extensively modified throughout its range that no occurrence of it is likely to recover –<br>• its species composition or structure; or<br>• its species composition and structure.<br>Section 33 of the BC Act provides for a collapsed ecological community to be regarded as a threatened ecological community if it is discovered in a state that no longer makes it eligible for listing as a collapsed ecological community. | |

***Categories and definitions for PECs as listed by the DBCA***

| Category | |
|---|---|
| Priority 1 | Poorly known ecological communities.<br>Ecological communities that are known from very few occurrences with a very restricted distribution (generally ≤5 occurrences or a total area of ≤100 ha). Occurrences are believed to be under threat either due to limited extent, or being on lands under immediate threat (e.g. within agricultural or pastoral lands, urban areas, active mineral leases) or for which current threats exist. May include communities with occurrences on protected lands. Communities may be included if they are comparatively well-known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under immediate threat from known threatening processes across their range. |
| Priority 2 | Poorly known ecological communities.<br>Communities that are known from few occurrences with a restricted distribution (generally ≤10 occurrences or a total area of ≤200 ha). At least some occurrences are not believed to be under immediate threat of destruction or degradation. Communities may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under threat from known threatening processes. |
| Priority 3 | Poorly known ecological communities.<br>– Communities that are known from several to many occurrences, a significant number or area of which are not under threat of habitat destruction or degradation or:<br>– communities known from a few widespread occurrences, which are either large or with significant remaining areas of habitat in which other occurrences may occur, much of it not under imminent threat, or;<br>– communities made up of large, and/or widespread occurrences, that may or may not be represented in the reserve system, but are under threat of modification across much of their range from processes such as grazing by domestic and/or feral stock, and inappropriate fire regimes.<br>Communities may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and/or are not well defined, and known threatening processes exist that could affect them. |
| Priority 4 | Ecological communities that are adequately known, rare but not threatened or meet criteria for Near Threatened, or that have been recently removed from the threatened list. These communities require regular monitoring.<br>– Rare. Ecological communities known from few occurrences that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These communities are usually represented on conservation lands. |

| Category | |
|---|---|
| | – Near Threatened. Ecological communities that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable.<br>– Ecological communities that have been removed from the list of threatened communities during the past five years. |
| Priority 5 | Conservation Dependent ecological communities.<br>Ecological communities that are not threatened but are subject to a specific conservation program, the cessation of which would result in the community becoming threatened within five years. |

## Other significant vegetation

Vegetation may be significant for a range of reasons other than a statutory listing. The EPA (2016a, b) states that significant vegetation may include vegetation that includes the following:

– Restricted distribution
– Degree of historical impact from threatening processes
– A role as a refuge
– Providing an important function required to maintain ecological integrity of a significant ecosystem
– Local endemism in restricted habitats
– Novel combinations of taxa
– A role as a key habitat for Threatened species or large population representing a significant proportion of the local to regional total population of a species
– Being representative of a vegetation unit in 'pristine' condition in a highly cleared landscape, recently discovered range extensions, or isolated outliers of the main range.

This may apply at a number of levels, so the unit may be significant when considered at the fine-scale (intra-locality), intermediate-scale (locality or inter-locality) or broad-scale (local to region).

# Flora and fauna

## Significant flora and fauna

Species of significant flora are protected under both Federal and State legislation. Any activities that are deemed to have a significant impact on species that are recognised by the EPBC Act, and/or the BC Act can warrant referral to the DCCEEW and/or the EPA.

The Federal conservation level of flora and fauna species and their significance status is assessed under the EPBC Act. The significance levels for flora and fauna used in the EPBC Act align with the International Union for Conservation of Nature (IUCN) Red List criteria, which are internationally recognised as providing best practice for assigning the conservation status of species. The EPBC Act also protects land and migratory species that are listed under International Agreements. The list of migratory species established under section 209 of the EPBC Act comprises:

– Migratory species which are native to Australia and are included in the appendices to the Bonn Convention (Convention on the Conservation of Migratory Species of Wild Animals Appendices I and II)
– Migratory species included in annexes established under the Japan-Australia Migratory Bird Agreement (JAMBA) and the China–Australia Migratory Bird Agreement (CAMBA)
– Native, migratory species identified in a list established under, or an instrument made under, an international agreement approved by the Minister, such as the republic of Korea–Australia Migratory Bird Agreement (ROKAMBA)

The State conservation level of flora and fauna species and their significance status also follows the IUCN Red List criteria. Under the BC Act flora and fauna can be listed as Threatened, Extinct and as Specially Protected species.

Threatened species are those are species which have been adequately searched for and are deemed to be, in the wild, either rare, under identifiable threat of extinction, or otherwise in need of special protection, and have been gazetted as such. The assessment of the conservation status of Threatened species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria. Specially protected species meet one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection. Species that are listed as Threatened or Extinct species under the BC Act cannot also be listed as Specially Protected species.

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened flora or fauna.

Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring.

Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

For the purposes of this assessment, all species listed under the EPBC Act, BC Act and DBCA Priority species are considered significant.

*Categories and definitions for EPBC Act and BC Act listed flora and fauna species*

| Conservation category | Definition |
|---|---|
| **Threatened species** | |
| Critically Endangered (CR) | Threatened species considered to be "facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines".<br>Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines. |
| Endangered (EN) | Threatened species considered to be "facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines".<br>Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines. |
| Vulnerable (VU) | Threatened species considered to be "facing a high risk of extinction in the wild in the medium term future, as determined in accordance with criteria set out in the ministerial guidelines".<br>Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines. |
| **Extinct species** | |
| Extinct (EX) | Species where "there is no reasonable doubt that the last member of the species has died", and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act). |
| Extinct in the Wild (EW) | Species that "is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form", and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act). |
| **Specially protected species** | |
| Migratory (MI) | Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).<br>Includes birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and fauna subject to the Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species. |
| Species of special conservation interest (conservation dependent fauna) (CD) | Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened. |
| Other specially protected fauna (OS) | Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act). |

*Codes for DBCA listed Priority flora and fauna*

| Priority category | Definition |
|---|---|
| Priority 1 | Poorly-known taxa<br>Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy |

| Priority category | Definition |
|---|---|
| | of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey. |
| Priority 2 | Poorly-known taxa<br>Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey. |
| Priority 3 | Poorly-known taxa<br>Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey. |
| Priority 4 | Rare, Near Threatened and other taxa in need of monitoring<br>– Rare: Taxa that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These taxa are usually represented on conservation lands.<br>– Near Threatened. Taxa that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable.<br>– Taxa that have been removed from the list of threatened taxa during the past five years for reasons other than taxonomy. |

## Other significant flora

Flora species, subspecies, varieties, hybrids and ecotypes may be significant for a range of reasons, other than a statutory listing. The EPA (2016a, b) states that significant flora may include taxa that have/are:

– A keystone role in a particular habitat for Threatened or Priority flora or fauna species, or large populations representing a considerable proportion of the local or regional total population of a species
– Relictual status, being representation of taxonomic or physiognomic groups that no longer occur widely in the broader landscape
– New species or anomalous features that indicate a potential new species
– Being representative of the range of a species (particularly, at the extremes of range, recently discovered range extensions, or isolated outliers of the main range)
– Unusual species, including restricted subspecies, varieties, or naturally occurring hybrids
– Local endemism (a restricted distribution) or association with a restricted habitat type (e.g. surface water or groundwater dependent ecosystems).

## Other significant fauna

Fauna species may be significant for a range of reasons other than those protected by international agreement or treaty, Specially Protected or Priority Fauna. Significant fauna may include short-range endemic species, species that have declining populations or declining distributions, species at the extremes of their range, or isolated outlying populations, or species which may be undescribed (EPA 2010).

# Introduced plants (weeds)

## Declared Pests

Information on species considered to be Declared Pests is provided under *State Biosecurity and Agriculture Management Act 2007.*

## Weeds of National Significance

The spread of weeds across a range of land uses or ecosystems is important in the context of socio-economic and environmental values. The assessment of Weeds of National Significance (WoNS) is based on four major criteria:

– Invasiveness
– Impacts
– Potential for spread
– Socio-economic and environmental values.

Australian state and territory governments have identified thirty-two Weeds of National Significance (WoNS); a list of 20 WoNS was endorsed in 1999 and a further 12 were added in 2012.

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# Appendix C

## Desktop searches

*NatureMap* Species Report

EPBC Act Protected Maters Search Tool report

*Vertebrate Fauna Nature Map Desktop Result – Camballin*

| TAXON | CLASS | CONS |
|---|---|---|
| *Accipiter cirrocephalus* | **BIRD** | |
| *Accipiter fasciatus* | **BIRD** | |
| *Acrocephalus australis* | **BIRD** | |
| *Actitis hypoleucos* | **BIRD** | **MI** |
| *Anas gracilis* | **BIRD** | |
| *Anas superciliosa* | **BIRD** | |
| *Anhinga novaehollandiae* | **BIRD** | |
| *Anseranas semipalmata* | **BIRD** | |
| *Aprosmictus erythropterus* | **BIRD** | |
| *Aquila audax* | **BIRD** | |
| *Ardea intermedia* | **BIRD** | |
| *Ardea modesta* | **BIRD** | |
| *Ardea pacifica* | **BIRD** | |
| *Ardeotis australis* | **BIRD** | |
| *Artamus cinereus* | **BIRD** | |
| *Artamus leucorynchus* | **BIRD** | |
| *Artamus leucorynchus* subsp. *leucopygialis* | **BIRD** | |
| *Artamus minor* | **BIRD** | |
| *Cacatua galerita* | **BIRD** | |
| *Cacatua sanguinea* | **BIRD** | |
| *Cacomantis pallidus* | **BIRD** | |
| *Cacomantis variolosus* | **BIRD** | |
| *Calidris acuminata* | **BIRD** | **MI** |
| *Calyptorhynchus banksii* | **BIRD** | |
| *Centropus phasianinus* | **BIRD** | |
| *Cincloramphus mathewsi* | **BIRD** | |
| *Circus approximans* | **BIRD** | |
| *Circus assimilis* | **BIRD** | |
| *Cisticola exilis* | **BIRD** | |
| *Colluricincla harmonica* | **BIRD** | |
| *Conopophila rufogularis* | **BIRD** | |
| *Coracina novaehollandiae* | **BIRD** | |
| *Coracina papuensis* | **BIRD** | |
| *Corvus orru* | **BIRD** | |
| *Cracticus nigrogularis* | **BIRD** | |
| *Cracticus tibicen* | **BIRD** | |
| *Cygnus atratus* | **BIRD** | |
| *Dacelo leachii* | **BIRD** | |
| *Dendrocygna eytoni* | **BIRD** | |
| *Dicaeum hirundinaceum* | **BIRD** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Dromaius novaehollandiae* | **BIRD** | |
| *Egretta garzetta* | **BIRD** | |
| *Egretta novaehollandiae* | **BIRD** | |
| *Elanus axillaris* | **BIRD** | |
| *Elseyornis melanops* | **BIRD** | |
| *Eolophus roseicapillus* | **BIRD** | |
| *Ephippiorhynchus asiaticus* | **BIRD** | |
| *Erythrogonys cinctus* | **BIRD** | |
| *Falco berigora* | **BIRD** | |
| *Falco cenchroides* | **BIRD** | |
| *Falco longipennis* | **BIRD** | |
| *Falco peregrinus* | **BIRD** | **OS** |
| *Falco subniger* | **BIRD** | |
| *Fulica atra* | **BIRD** | |
| *Geopelia cuneata* | **BIRD** | |
| *Geopelia humeralis* | **BIRD** | |
| *Geopelia striata* | **BIRD** | |
| *Glareola maldivarum* | **BIRD** | **MI** |
| *Grallina cyanoleuca* | **BIRD** | |
| *Grus rubicunda* | **BIRD** | |
| *Haliaeetus leucogaster* | **BIRD** | |
| *Haliastur sphenurus* | **BIRD** | |
| *Hamirostra melanosternon* | **BIRD** | |
| *Hieraaetus morphnoides* | **BIRD** | |
| *Hydroprogne caspia* | **BIRD** | **MI** |
| *Irediparra gallinacea* | **BIRD** | |
| *Lichenostomus flavescens* | **BIRD** | |
| *Lichenostomus penicillatus* | **BIRD** | |
| *Lichenostomus unicolor* | **BIRD** | |
| *Lichenostomus virescens* | **BIRD** | |
| *Lichmera indistincta* | **BIRD** | |
| *Malurus coronatus* subsp. *coronatus* | **BIRD** | **EN** |
| *Malurus lamberti* | **BIRD** | |
| *Malurus melanocephalus* | **BIRD** | |
| *Manorina flavigula* | **BIRD** | |
| *Melithreptus gularis* | **BIRD** | |
| *Melopsittacus undulatus* | **BIRD** | |
| *Merops ornatus* | **BIRD** | |
| *Microcarbo melanoleucos* | **BIRD** | |
| *Milvus migrans* | **BIRD** | |
| *Mirafra javanica* | **BIRD** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Myiagra inquieta* | **BIRD** | |
| *Neochmia phaeton* | **BIRD** | |
| *Neochmia ruficauda* | **BIRD** | |
| *Nettapus pulchellus* | **BIRD** | |
| *Ninox connivens* | **BIRD** | |
| *Ninox novaeseelandiae* | **BIRD** | |
| *Nycticorax caledonicus* | **BIRD** | |
| *Nymphicus hollandicus* | **BIRD** | |
| *Ocyphaps lophotes* | **BIRD** | |
| *Oriolus sagittatus* | **BIRD** | |
| *Pachycephala rufiventris* | **BIRD** | |
| *Pardalotus rubricatus* | **BIRD** | |
| *Pardalotus striatus* | **BIRD** | |
| *Pelecanus conspicillatus* | **BIRD** | |
| *Petrochelidon ariel* | **BIRD** | |
| *Petrochelidon nigricans* | **BIRD** | |
| *Phalacrocorax sulcirostris* | **BIRD** | |
| *Phaps histrionica* | **BIRD** | |
| *Philemon citreogularis* | **BIRD** | |
| *Platalea flavipes* | **BIRD** | |
| *Platalea regia* | **BIRD** | |
| *Plegadis falcinellus* | **BIRD** | **MI** |
| *Pluvialis fulva* | **BIRD** | **MI** |
| *Podargus strigoides* | **BIRD** | |
| *Poecilodryas superciliosa* subsp. *cerviniventris* | **BIRD** | |
| *Poephila acuticauda* | **BIRD** | |
| *Pomatostomus temporalis* | **BIRD** | |
| *Ptilonorhynchus nuchalis* | **BIRD** | |
| *Rhipidura albiscapa* | **BIRD** | |
| *Rhipidura leucophrys* | **BIRD** | |
| *Smicrornis brevirostris* | **BIRD** | |
| *Stiltia isabella* | **BIRD** | |
| *Tachybaptus novaehollandiae* | **BIRD** | |
| *Taeniopygia bichenovii* | **BIRD** | |
| *Taeniopygia guttata* | **BIRD** | |
| *Threskiornis molucca* | **BIRD** | |
| *Threskiornis spinicollis* | **BIRD** | |
| *Todiramphus pyrrhopygia* | **BIRD** | |
| *Todiramphus pyrrhopygius* | **BIRD** | |
| *Todiramphus sanctus* | **BIRD** | |
| *Tringa nebularia* | **BIRD** | **MI** |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Tringa stagnatilis* | **BIRD** | **MI** |
| *Vanellus miles* | **BIRD** | |
| *Craterocephalus lentiginosus* | **FISH** | **P2** |
| *Hannia greenwayi* | **FISH** | **P1** |
| *Hephaestus jenkinsi* | **FISH** | |
| *Leiopotherapon unicolor* | **FISH** | |
| *Melanotaenia australis* | **FISH** | |
| *Pristis microdon* | **FISH** | |
| *Pristis pristis* | **FISH** | **P3** |
| *Macropus agilis* | **MAMMAL** | |
| *Macropus robustus* subsp. *erubescens* | **MAMMAL** | |
| *Macropus sp.* | **MAMMAL** | |
| *Petrogale lateralis* subsp. (WAM M15135) | **MAMMAL** | |
| *Trichosurus vulpecula* subsp. *arnhemensis* | **MAMMAL** | **VU** |
| *Vespadelus caurinus* | **MAMMAL** | |
| *Vespadelus douglasorum* | **MAMMAL** | **P2** |
| *Zyzomys argurus* | **MAMMAL** | |
| *Crocodylus johnstoni* | **REPTILE** | **OS** |
| *Ctenophorus caudicinctus* subsp. *macropus* | **REPTILE** | |
| *Ctenophorus isolepis* subsp. *isolepis* | **REPTILE** | |
| *Ctenophorus nuchalis* | **REPTILE** | |
| *Ctenotus saxatilis* | **REPTILE** | |
| *Demansia angusticeps* | **REPTILE** | |
| *Demansia sp.* | **REPTILE** | |
| *Emydura victoriae* | **REPTILE** | |
| *Lerista greeri* | **REPTILE** | |
| *Lerista simillima* | **REPTILE** | |
| *Lialis burtonis* | **REPTILE** | |
| *Menetia greyii* | **REPTILE** | |
| *Morethia ruficauda* subsp. *ruficauda* | **REPTILE** | |
| *Pseudechis australis* | **REPTILE** | |
| *Pseudonaja mengdeni* | **REPTILE** | |
| *Ramphotyphlops diversus* | **REPTILE** | |
| *Vermicella intermedia* | **REPTILE** | |
| *Cyclorana australis* | **AMPHIBIAN** | |
| *Cyclorana cryptotis* | **AMPHIBIAN** | |
| *Cyclorana vagitus* | **AMPHIBIAN** | |
| *Litoria caerulea* | **AMPHIBIAN** | |
| *Litoria pallida* | **AMPHIBIAN** | |
| *Litoria rothii* | **AMPHIBIAN** | |
| *Litoria rubella* | **AMPHIBIAN** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Notaden nichollsi* | **AMPHIBIAN** | |
| *Platyplectrum ornatum* | **AMPHIBIAN** | |
| *Uperoleia mjobergii* | **AMPHIBIAN** | |



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*Terrestrial Flora Nature Map Desktop Result for Camballin*

| TAXON | CLASS | CONS |
|---|---|---|
| *Abutilon hannii* | **DICOT** | |
| *Acacia acradenia* | **DICOT** | |
| *Acacia adoxa* | **DICOT** | |
| *Acacia adoxa* var. *adoxa* | **DICOT** | |
| *Acacia adoxa* var. *subglabra* | **DICOT** | |
| *Acacia ancistrocarpa* | **DICOT** | |
| *Acacia citriodora* | **DICOT** | |
| *Acacia colei* var. *colei* | **DICOT** | |
| *Acacia colei* var. *ileocarpa* | **DICOT** | |
| *Acacia deltoidea* subsp. *deltoidea* | **DICOT** | |
| *Acacia drepanocarpa* subsp. *latifolia* | **DICOT** | |
| *Acacia eriopoda* | **DICOT** | |
| *Acacia eriopoda x monticola* | **DICOT** | |
| *Acacia hemignosta* (phyllodes narrow) | **DICOT** | |
| *Acacia hippuroides* | **DICOT** | |
| *Acacia lycopodiifolia* | **DICOT** | |
| *Acacia lysiphloia* | **DICOT** | |
| *Acacia monticola* | **DICOT** | |
| *Acacia platycarpa* | **DICOT** | |
| *Acacia plectocarpa* subsp. *plectocarpa* | **DICOT** | |
| *Acacia stipuligera* | **DICOT** | |
| *Acacia tumida var. tumida* | **DICOT** | |
| *Acacia victoriae* | **DICOT** | |
| *Acacia victoriae subsp. fasciaria* | **DICOT** | |
| *Achyranthes aspera* | **DICOT** | |
| *Aeschynomene indica* | **DICOT** | |
| *Alternanthera angustifolia* | **DICOT** | |
| *Alternanthera nana* | **DICOT** | |
| *Alternanthera sp.* | **DICOT** | |
| *Amaranthus induratus* | **DICOT** | |
| *Amaranthus pallidiflorus* | **DICOT** | |
| *Ammannia multiflora* | **DICOT** | |
| *Amyema benthamii* | **DICOT** | |
| *Amyema dolichopoda* | **DICOT** | |
| *Amyema sanguinea* var. *sanguinea* | **DICOT** | |
| *Apowollastonia cylindrica* | **DICOT** | |
| *Atalaya hemiglauca* | **DICOT** | |
| *Barringtonia acutangula* subsp. *acutangula* | **DICOT** | |
| *Basilicum polystachyon* | **DICOT** | |
| *Bauhinia cunninghamii* | **DICOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Bauhinia sp.* | **DICOT** | |
| *Bergia perennis* subsp. *obtusifolia* | **DICOT** | |
| *Bergia trimera* | **DICOT** | |
| *Blumea integrifolia* | **DICOT** | |
| *Boerhavia burbidgeana* | **DICOT** | |
| *Boerhavia dominii* | **DICOT** | |
| *Boerhavia sp.* | **DICOT** | |
| *Bonamia linearis* | **DICOT** | |
| *Bonamia pannosa* | **DICOT** | |
| *Brachychiton viscidulus* | **DICOT** | |
| *Cajanus acutifolius* | **DICOT** | |
| *Cajanus cinereus* | **DICOT** | |
| *Cajanus lanceolatus* | **DICOT** | |
| *Cajanus marmoratus* | **DICOT** | |
| *Cajanus pubescens* | **DICOT** | |
| *Cajanus reticulatus* var. *grandifolius* | **DICOT** | |
| *Cajanus scarabaeoides* var. *pedunculatus* | **DICOT** | |
| *Calandrinia strophiolata* | **DICOT** | |
| *Calytrix achaeta* | **DICOT** | |
| *Calytrix exstipulata* | **DICOT** | |
| *Cassytha filiformis* | **DICOT** | |
| *Centipeda minima* | **DICOT** | |
| *Chamaecrista symonii* | **DICOT** | |
| *Cleome tetrandra* | **DICOT** | |
| *Cleome tetrandra* var. *tetrandra* | **DICOT** | |
| *Clerodendrum tomentosum* | **DICOT** | |
| *Clerodendrum tomentosum* var. *lanceolatum* | **DICOT** | |
| *Clerodendrum tomentosum* var. *mollissima* | **DICOT** | |
| *Coldenia procumbens* | **DICOT** | |
| *Corchorus olitorius* | **DICOT** | |
| *Corchorus sidoides* | **DICOT** | |
| *Corchorus sidoides* subsp. *sidoides* | **DICOT** | |
| *Corchorus sp. Fitzroy Crossing (A.J. Ewart s.n. PERTH 01526790)* | **DICOT** | |
| *Corymbia cadophora subsp. cadophora* | **DICOT** | |
| *Corymbia cliftoniana* | **DICOT** | |
| *Corymbia dendromerinx* | **DICOT** | |
| *Corymbia flavescens* | **DICOT** | |
| *Corymbia latifolia* | **DICOT** | |
| *Crotalaria cunninghamii* | **DICOT** | |
| *Crotalaria medicaginea* var. *neglecta* | **DICOT** | |
| *Crotalaria ramosissima* | **DICOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Crotalaria retusa* | **DICOT** | |
| *Crotalaria verrucosa* | **DICOT** | |
| *Cucumis maderaspatensis* | **DICOT** | |
| *Cucumis picrocarpus* | **DICOT** | |
| *Cullen cinereum* | **DICOT** | |
| *Cullen corallum* | **DICOT** | |
| *Cullen leucanthum* | **DICOT** | |
| *Cullen martinii* | **DICOT** | |
| *Cullen pustulatum* | **DICOT** | |
| *Cyanostegia cyanocalyx* | **DICOT** | |
| *Datura inoxia* | **DICOT** | |
| *Dentella minutissima* | **DICOT** | |
| *Desmodium filiforme* | **DICOT** | |
| *Dicliptera armata* | **DICOT** | |
| *Dolichandrone occidentalis* | **DICOT** | |
| *Dysphania plantaginella* | **DICOT** | |
| *Enchylaena tomentosa* | **DICOT** | |
| *Eremophila bignoniiflora* | **DICOT** | |
| *Eucalyptus brevifolia* | **DICOT** | |
| *Euphorbia fitzroyensis* | **DICOT** | |
| *Euphorbia hassallii* | **DICOT** | |
| *Euphorbia psilosperma* | **DICOT** | |
| *Euphorbia trigonosperma* | **DICOT** | |
| *Euphorbia vaccaria* var. *vaccaria* | **DICOT** | |
| *Ficus cerasicarpa* | **DICOT** | |
| *Glinus lotoides* | **DICOT** | |
| *Glinus oppositifolius* | **DICOT** | |
| *Glossostigma drummondii* | **DICOT** | |
| *Gomphrena breviflora* | **DICOT** | |
| *Gomphrena canescens* subsp. *canescens* | **DICOT** | |
| *Gomphrena cunninghamii* | **DICOT** | |
| *Gomphrena flaccida* | **DICOT** | |
| *Gomphrena lanata* | **DICOT** | |
| *Gomphrena leptoclada* | **DICOT** | |
| *Gomphrena leptoclada* subsp. *leptoclada* | **DICOT** | |
| *Goodenia armitiana* | **DICOT** | |
| *Goodenia bicolor* | **DICOT** | |
| *Goodenia byrnesii* | **DICOT** | **P3** |
| *Goodenia lamprosperma* | **DICOT** | |
| *Goodenia odonnellii* | **DICOT** | |
| *Goodenia scaevolina* | **DICOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Goodenia sepalosa* var. *sepalosa* | **DICOT** | |
| *Gossypium australe* | **DICOT** | |
| *Grevillea mimosoides* | **DICOT** | |
| *Grevillea parallela* | **DICOT** | |
| *Grevillea pteridifolia* | **DICOT** | |
| *Grevillea pyramidalis* subsp. *leucadendron* | **DICOT** | |
| *Gyrostemon tepperi* | **DICOT** | |
| *Hakea arborescens* | **DICOT** | |
| *Halgania solanacea* var. *solanacea* | **DICOT** | |
| *Heliotropium geocharis* | **DICOT** | **P1** |
| *Heliotropium glabellum* | **DICOT** | |
| *Heliotropium leptaleum* | **DICOT** | |
| *Heliotropium ovalifolium* | **DICOT** | |
| *Heliotropium tanythrix* | **DICOT** | |
| *Heliotropium tenuifolium* | **DICOT** | |
| *Hibiscus austrinus* var. *austrinus* | **DICOT** | |
| *Hibiscus leptocladus* | **DICOT** | |
| *Hibiscus meraukensis* | **DICOT** | |
| *Hibiscus sabdariffa* | **DICOT** | |
| *Hibiscus sp.* | **DICOT** | |
| *Hibiscus trionum* var. *vesicarius* | **DICOT** | |
| *Hybanthus aurantiacus* | **DICOT** | |
| *Hybanthus enneaspermus* subsp. *enneaspermus* | **DICOT** | |
| *Indigofera colutea* | **DICOT** | |
| *Indigofera hirsuta* | **DICOT** | |
| *Indigofera linnaei* | **DICOT** | |
| *Ipomoea diamantinensis* | **DICOT** | |
| *Ipomoea eriocarpa* | **DICOT** | |
| *Ipomoea muelleri* | **DICOT** | |
| *Ipomoea polymorpha* | **DICOT** | |
| *Jacksonia forrestii* | **DICOT** | |
| *Jacquemontia browniana* | **DICOT** | |
| *Leptopus decaisnei* | **DICOT** | |
| *Ludwigia octovalvis* | **DICOT** | |
| *Ludwigia perennis* | **DICOT** | |
| *Luffa saccata* | **DICOT** | |
| *Mallotus nesophilus* | **DICOT** | |
| *Marsdenia angustata* | **DICOT** | |
| *Marsdenia viridiflora subsp. tropica* | **DICOT** | |
| *Melaleuca minutifolia* | **DICOT** | |
| *Melaleuca nervosa* | **DICOT** | |



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|---|---|---|
| *Melaleuca nervosa* subsp. *nervosa* | **DICOT** | |
| *Melochia pyramidata* | **DICOT** | |
| *Mitrasacme galbina* | **DICOT** | |
| *Mitrasacme hispida* | **DICOT** | |
| *Myriophyllum verrucosum* | **DICOT** | |
| *Nauclea orientalis* | **DICOT** | |
| *Nelsonia campestris* | **DICOT** | |
| *Neptunia dimorphantha* | **DICOT** | |
| *Oldenlandia mitrasacmoides* subsp. *mitrasacmoides* | **DICOT** | |
| *Oldenlandia sp.* | **DICOT** | |
| *Operculina aequisepala* | **DICOT** | |
| *Parkinsonia aculeata* | **DICOT** | |
| *Pentalepis trichodesmoides* subsp. *trichodesmoides* | **DICOT** | |
| *Petalostigma pubescens* | **DICOT** | |
| *Petalostylis cassioides* | **DICOT** | |
| *Phyllanthus maderaspatensis* | **DICOT** | |
| *Phyllanthus polycladus* | **DICOT** | |
| *Phyllanthus reticulatus* | **DICOT** | |
| *Physalis angulata* | **DICOT** | |
| *Pluchea tetranthera* | **DICOT** | |
| *Polycarpaea holtzei* | **DICOT** | |
| *Polycarpaea longiflora* | **DICOT** | |
| *Polymeria ambigua* | **DICOT** | |
| *Portulaca digyna* | **DICOT** | |
| *Portulaca oligosperma* | **DICOT** | |
| *Portulaca sp.* | **DICOT** | |
| *Pterocaulon sphacelatum* | **DICOT** | |
| *Ptilotus exaltatus* | **DICOT** | |
| *Ptilotus fusiformis* | **DICOT** | |
| *Ptilotus lanatus* | **DICOT** | |
| *Ptilotus murrayi* | **DICOT** | |
| *Ptilotus polystachyus* | **DICOT** | |
| *Rostellularia adscendens* var. *clementii* | **DICOT** | |
| *Rostellularia adscendens* var. *clementii / adscendens* var. *largiflorens* | **DICOT** | |
| *Salsola australis* | **DICOT** | |
| *Santalum lanceolatum* | **DICOT** | |
| *Scaevola sp*. Mt Anderson (H.F. Broadbent 614) | **DICOT** | |
| *Senna artemisioides* subsp. *oligophylla* | **DICOT** | |
| *Senna barclayana* | **DICOT** | |
| *Senna glutinosa* subsp. x *luerssenii* | **DICOT** | |
| *Senna notabilis* | **DICOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Senna occidentalis* | **DICOT** | |
| *Senna oligoclada* | **DICOT** | |
| *Sesbania cannabina* | **DICOT** | |
| *Sesbania erubescens* | **DICOT** | |
| *Sesbania sp.* | **DICOT** | |
| *Solanum dioicum* | **DICOT** | |
| *Solanum dioicum* sens. lat. | **DICOT** | |
| *Solanum lucani* | **DICOT** | |
| *Spermacoce dolichosperma* | **DICOT** | |
| *Spermacoce hillii* | **DICOT** | |
| *Spermacoce occidentalis* | **DICOT** | |
| *Spermacoce sp. Cylindrata* (R.K. Harwood 1443) | **DICOT** | |
| *Stemodia florulenta* | **DICOT** | |
| *Stemodia glabella* | **DICOT** | |
| *Stemodia sp.* | **DICOT** | |
| *Streptoglossa tenuiflora* | **DICOT** | |
| *Stylidium adenophorum* | **DICOT** | |
| *Stylidium leptorrhizum* | **DICOT** | |
| *Stylidium semipartitum* | **DICOT** | |
| *Stylosanthes humilis* | **DICOT** | |
| *Swainsona campylantha* | **DICOT** | |
| *Tephrosia lasiochlaena* | **DICOT** | |
| *Tephrosia leptoclada* | **DICOT** | |
| *Tephrosia pedleyi* | **DICOT** | **P3** |
| *Tephrosia rosea* | **DICOT** | |
| *Tephrosia sp.* | **DICOT** | |
| *Tephrosia stipuligera* | **DICOT** | |
| *Tephrosia virens* | **DICOT** | |
| *Terminalia grandiflora* | **DICOT** | |
| *Terminalia platyphylla* | **DICOT** | |
| *Trachymene didiscoides* | **DICOT** | |
| *Trianthema triquetrum* | **DICOT** | |
| *Tribulopis sessilis* | **DICOT** | |
| *Tribulus cistoides* | **DICOT** | |
| *Tribulus occidentalis* | **DICOT** | |
| *Trichodesma zeylanicum* | **DICOT** | |
| *Trichodesma zeylanicum* var. *latisepaleum* | **DICOT** | |
| *Triumfetta johnstonii* | **DICOT** | |
| *Triumfetta plumigera* | **DICOT** | |
| *Triumfetta ryeae* subsp. *brevipetala* | **DICOT** | |
| *Velleia panduriformis* | **DICOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Wahlenbergia caryophylloides* | **DICOT** | |
| *Waltheria indica* | **DICOT** | |
| *Xenostegia tridentata* | **DICOT** | |
| *Zornia muelleriana* subsp. *congesta* | **DICOT** | |
| *Cheilanthes brownii* | **FERN** | |
| *Platyzoma microphyllum* | **FERN** | |
| *Aponogeton euryspermus* | **MONOCOT** | |
| *Arundinella nepalensis* | **MONOCOT** | |
| *Brachyachne convergens* | **MONOCOT** | |
| *Bulbostylis barbata* | **MONOCOT** | |
| *Cenchrus basedowii* | **MONOCOT** | |
| *Cenchrus biflorus* | **MONOCOT** | |
| *Chloris pectinata* | **MONOCOT** | |
| *Commelina ciliata* | **MONOCOT** | |
| *Cyperus bifax* | **MONOCOT** | |
| *Cyperus castaneus* var. *brevimucronatus* | **MONOCOT** | |
| *Cyperus pygmaeus* | **MONOCOT** | |
| *Cyperus vaginatus* | **MONOCOT** | |
| *Dactyloctenium radulans* | **MONOCOT** | |
| *Digitaria bicornis* | **MONOCOT** | |
| *Digitaria ciliaris* | **MONOCOT** | |
| *Digitaria papposa* | **MONOCOT** | |
| *Dinebra neesii* | **MONOCOT** | |
| *Enneapogon polyphyllus* | **MONOCOT** | |
| *Eragrostis speciosa* | **MONOCOT** | |
| *Eragrostis tenellula* | **MONOCOT** | |
| *Eriachne aristidea* | **MONOCOT** | |
| *Eriachne fastigiata* | **MONOCOT** | |
| *Eriachne glauca* | **MONOCOT** | |
| *Eriachne obtusa* | **MONOCOT** | |
| *Eriocaulon setaceum* | **MONOCOT** | |
| *Eriochloa pseudoacrotricha* | **MONOCOT** | |
| *Fimbristylis ferruginea* | **MONOCOT** | |
| *Fimbristylis microcarya* | **MONOCOT** | |
| *Fimbristylis schultzii* | **MONOCOT** | |
| *Fimbristylis simulans* | **MONOCOT** | |
| *Iseilema vaginiflorum* | **MONOCOT** | |
| *Lipocarpha microcephala* | **MONOCOT** | |
| *Panicum decompositum* | **MONOCOT** | |
| *Panicum laevinode* | **MONOCOT** | |
| *Polytoca cyathopoda* | **MONOCOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Pseudoraphis spinescens* | **MONOCOT** | |
| *Schoenoplectiella laevis* | **MONOCOT** | |
| *Sehima nervosum* | **MONOCOT** | |
| *Sorghum stipoideum* | **MONOCOT** | |
| *Sporobolus mitchellii* | **MONOCOT** | |
| *Whiteochloa airoides* | **MONOCOT** | |
| *Xerochloa barbata* | **MONOCOT** | |
| *Xerochloa laniflora* | **MONOCOT** | |
| *Yakirra australiensis* | **MONOCOT** | |
| *Yakirra pauciflora* | **MONOCOT** | |



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*Vertebrate Fauna Nature Map Desktop Result – Derby*

| TAXON | CLASS | CONS |
|---|---|---|
| *Accipiter cirrocephalus* | **BIRD** | |
| *Accipiter fasciatus* | **BIRD** | |
| *Acrocephalus australis* | **BIRD** | |
| *Acrocephalus australis* subsp. *gouldi* | **BIRD** | |
| *Actitis hypoleucos* | **BIRD** | **MI** |
| *Aegotheles cristatus* | **BIRD** | |
| *Aegotheles cristatus* subsp. *leucogaster* | **BIRD** | |
| *Alcedo azurea* subsp. *ruficollaris* | **BIRD** | |
| *Amaurornis cinerea* | **BIRD** | |
| *Anas gracilis* | **BIRD** | |
| *Anas superciliosa* | **BIRD** | |
| *Anhinga melanogaster* subsp. *novaehollandiae* | **BIRD** | |
| *Anhinga novaehollandiae* | **BIRD** | |
| *Anseranas semipalmata* | **BIRD** | |
| *Aprosmictus erythropterus* | **BIRD** | |
| *Apus pacificus* | **BIRD** | **MI** |
| *Apus pacificus* subsp. *pacificus* | **BIRD** | |
| *Aquila audax* | **BIRD** | |
| *Ardea ibis* | **BIRD** | |
| *Ardea intermedia* | **BIRD** | |
| *Ardea modesta* | **BIRD** | |
| *Ardea pacifica* | **BIRD** | |
| *Ardea sumatrana* | **BIRD** | |
| *Ardeotis australis* | **BIRD** | |
| *Arenaria interpres* | **BIRD** | **MI** |
| *Artamus cinereus* | **BIRD** | |
| *Artamus leucorynchus* | **BIRD** | |
| *Artamus leucorynchus* subsp. *leucopygialis* | **BIRD** | |
| *Artamus minor* | **BIRD** | |
| *Artamus personatus* | **BIRD** | |
| *Aviceda subcristata* | **BIRD** | |
| *Aythya australis* | **BIRD** | |
| *Burhinus grallarius* | **BIRD** | |
| *Butorides striata* | **BIRD** | |
| *Cacatua galerita* | **BIRD** | |
| *Cacatua roseicapilla* subsp. *roseicapilla* | **BIRD** | |
| *Cacatua sanguinea* | **BIRD** | |
| *Cacatua sanguinea* subsp. *sanguinea* | **BIRD** | |
| *Cacomantis pallidus* | **BIRD** | |
| *Cacomantis variolosus* | **BIRD** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Calidris acuminata* | **BIRD** | **MI** |
| *Calidris alba* | **BIRD** | **MI** |
| *Calidris ferruginea* | **BIRD** | **CR** |
| *Calidris melanotos* | **BIRD** | **MI** |
| *Calidris ruficollis* | **BIRD** | **MI** |
| *Calidris subminuta* | **BIRD** | **MI** |
| *Calyptorhynchus banksii* | **BIRD** | |
| *Centropus phasianinus* | **BIRD** | |
| *Centropus phasianinus* subsp. *phasianinus* | **BIRD** | |
| *Ceyx azureus* | **BIRD** | |
| *Charadrius leschenaultii* | **BIRD** | **VU** |
| *Charadrius mongolus* | **BIRD** | **EN** |
| *Charadrius ruficapillus* | **BIRD** | |
| *Chenonetta jubata* | **BIRD** | |
| *Chlidonias leucopterus* | **BIRD** | **MI** |
| *Chroicocephalus novaehollandiae* | **BIRD** | |
| *Chrysococcyx minutillus* subsp. *minutillus* | **BIRD** | |
| *Cincloramphus cruralis* | **BIRD** | |
| *Cincloramphus mathewsi* | **BIRD** | |
| *Circus approximans* | **BIRD** | |
| *Circus assimilis* | **BIRD** | |
| *Cissomela pectoralis* | **BIRD** | |
| *Cisticola exilis* | **BIRD** | |
| *Cisticola exilis* subsp. *exilis* | **BIRD** | |
| *Climacteris melanura* | **BIRD** | |
| *Climacteris melanura* subsp. *melanura* | **BIRD** | |
| *Colluricincla harmonica* | **BIRD** | |
| *Colluricincla harmonica* subsp. *brunnea* | **BIRD** | |
| *Colluricincla woodwardi* | **BIRD** | |
| *Columba livia* | **BIRD** | |
| *Conopophila rufogularis* | **BIRD** | |
| *Coracina novaehollandiae* | **BIRD** | |
| *Coracina papuensis* | **BIRD** | |
| *Corvus bennetti* | **BIRD** | |
| *Corvus orru* | **BIRD** | |
| *Coturnix pectoralis* | **BIRD** | |
| *Coturnix ypsilophora* | **BIRD** | |
| *Cracticus nigrogularis* | **BIRD** | |
| *Cracticus tibicen* | **BIRD** | |
| *Cracticus torquatus* | **BIRD** | |
| *Cuculus optatus* | **BIRD** | **MI** |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Cygnus atratus* | **BIRD** | |
| *Dacelo leachii* | **BIRD** | |
| *Dacelo leachii* subsp. *leachii* | **BIRD** | |
| *Daphoenositta chrysoptera* | **BIRD** | |
| *Daphoenositta chrysoptera* subsp. *leucoptera* | **BIRD** | |
| *Dendrocygna arcuata* | **BIRD** | |
| *Dendrocygna eytoni* | **BIRD** | |
| *Dicaeum hirundinaceum* | **BIRD** | |
| *Egretta garzetta* | **BIRD** | |
| *Egretta novaehollandiae* | **BIRD** | |
| *Egretta picata* | **BIRD** | |
| *Egretta sacra* | **BIRD** | |
| *Elanus axillaris* | **BIRD** | |
| *Elseyornis melanops* | **BIRD** | |
| *Emblema pictum* | **BIRD** | |
| *Entomyzon cyanotis* | **BIRD** | |
| *Eolophus roseicapillus* | **BIRD** | |
| *Eopsaltria pulverulenta* | **BIRD** | |
| *Ephippiorhynchus asiaticus* | **BIRD** | |
| *Epthianura crocea* | **BIRD** | |
| *Erythrogonys cinctus* | **BIRD** | |
| *Erythrura gouldiae* | **BIRD** | **P4** |
| *Eudynamys orientalis* | **BIRD** | |
| *Eulabeornis castaneoventris* subsp. *castaneoventris* | **BIRD** | |
| *Eurystomus orientalis* | **BIRD** | |
| *Eurystomus orientalis* subsp. *pacificus* | **BIRD** | |
| *Falco berigora* | **BIRD** | |
| *Falco berigora* subsp. *berigora* | **BIRD** | |
| *Falco cenchroides* | **BIRD** | |
| *Falco hypoleucos* | **BIRD** | **VU** |
| *Falco longipennis* | **BIRD** | |
| *Falco peregrinus* | **BIRD** | **OS** |
| *Falco subniger* | **BIRD** | |
| *Fulica atra* | **BIRD** | |
| *Fulica atra* subsp. *australis* | **BIRD** | |
| *Gallinago megala* | **BIRD** | **MI** |
| *Gallinago stenura* | **BIRD** | **MI** |
| *Gallirallus philippensis* | **BIRD** | |
| *Gelochelidon nilotica* | **BIRD** | **MI** |
| *Geopelia cuneata* | **BIRD** | |
| *Geopelia humeralis* | **BIRD** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Geopelia striata* | **BIRD** | |
| *Geopelia striata* subsp. *placida* | **BIRD** | |
| *Geophaps plumifera* | **BIRD** | |
| *Gerygone levigaster* | **BIRD** | |
| *Gerygone levigaster* subsp. *levigaster* | **BIRD** | |
| *Gerygone olivacea* subsp. *rogersi* | **BIRD** | |
| *Gerygone tenebrosa* | **BIRD** | |
| *Glareola maldivarum* | **BIRD** | **MI** |
| *Grallina cyanoleuca* | **BIRD** | |
| *Grus rubicunda* | **BIRD** | |
| *Haliaeetus leucogaster* | **BIRD** | |
| *Haliastur indus* | **BIRD** | |
| *Haliastur indus* subsp. *girrenera* | **BIRD** | |
| *Haliastur sphenurus* | **BIRD** | |
| *Hamirostra isura* | **BIRD** | |
| *Hamirostra melanosternon* | **BIRD** | |
| *Heteromunia pectoralis* | **BIRD** | |
| *Hieraaetus morphnoides* | **BIRD** | |
| *Himantopus himantopus* | **BIRD** | |
| *Himantopus himantopus* subsp. *leucocephalus* | **BIRD** | |
| *Hirundo neoxena* | **BIRD** | |
| *Hirundo rustica* | **BIRD** | **MI** |
| *Hydroprogne caspia* | **BIRD** | **MI** |
| *Irediparra gallinacea* | **BIRD** | |
| *Lichenostomus flavescens* | **BIRD** | |
| *Lichenostomus penicillatus* | **BIRD** | |
| *Lichenostomus plumulus* | **BIRD** | |
| *Lichenostomus unicolor* | **BIRD** | |
| *Lichenostomus virescens* | **BIRD** | |
| *Lichmera indistincta* | **BIRD** | |
| *Limnodromus semipalmatus* | **BIRD** | **MI** |
| *Limosa lapponica* | **BIRD** | **MI** |
| *Limosa limosa* | **BIRD** | **MI** |
| *Malacorhynchus membranaceus* | **BIRD** | |
| *Malurus coronatus* subsp. *coronatus* | **BIRD** | **EN** |
| *Malurus lamberti* | **BIRD** | |
| *Malurus melanocephalus* | **BIRD** | |
| *Malurus melanocephalus* subsp. *cruentatus* | **BIRD** | |
| *Manorina flavigula* | **BIRD** | |
| *Megalurus gramineus* | **BIRD** | |
| *Megalurus timoriensis* | **BIRD** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Melithreptus albogularis* | **BIRD** | |
| *Melithreptus gularis* | **BIRD** | |
| *Melopsittacus undulatus* | **BIRD** | |
| *Merops ornatus* | **BIRD** | |
| *Microcarbo melanoleucos* | **BIRD** | |
| *Microeca fascinans* | **BIRD** | |
| *Microeca fascinans* subsp. *fascinans* | **BIRD** | |
| *Microeca flavigaster* | **BIRD** | |
| *Milvus migrans* | **BIRD** | |
| *Milvus migrans* subsp. *affinis* | **BIRD** | |
| *Mirafra javanica* | **BIRD** | |
| *Myiagra alecto* | **BIRD** | |
| *Myiagra inquieta* | **BIRD** | |
| *Myiagra rubecula* | **BIRD** | |
| *Myiagra ruficollis* | **BIRD** | |
| *Myiagra ruficollis* subsp. *mimikae* | **BIRD** | |
| *Myzomela erythrocephala* | **BIRD** | |
| *Myzomela erythrocephala* subsp. *erythrocephala* | **BIRD** | |
| *Neochmia ruficauda* subsp. *clarescens* | **BIRD** | |
| *Nettapus pulchellus* | **BIRD** | |
| *Ninox connivens* | **BIRD** | |
| *Ninox novaeseelandiae* | **BIRD** | |
| *Numenius madagascariensis* | **BIRD** | **CR** |
| *Numenius minutus* | **BIRD** | **MI** |
| *Numenius phaeopus* | **BIRD** | **MI** |
| *Nycticorax caledonicus* | **BIRD** | |
| *Nycticorax caledonicus* subsp. *hilli* | **BIRD** | |
| *Nymphicus hollandicus* | **BIRD** | |
| *Ocyphaps lophotes* | **BIRD** | |
| *Oriolus sagittatus* | **BIRD** | |
| *Pachycephala lanioides* | **BIRD** | |
| *Pachycephala melanura* | **BIRD** | |
| *Pachycephala melanura* subsp. *melanura* | **BIRD** | |
| *Pachycephala rufiventris* | **BIRD** | |
| *Pachycephala rufiventris* subsp. *rufiventris* | **BIRD** | |
| *Pandion cristatus* | **BIRD** | **MI** |
| *Pardalotus rubricatus* | **BIRD** | |
| *Pardalotus striatus* | **BIRD** | |
| *Pelecanus conspicillatus* | **BIRD** | |
| *Petrochelidon ariel* | **BIRD** | |
| *Petrochelidon nigricans* | **BIRD** | |



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|---|---|---|
| *Petroica goodenovii* | **BIRD** | |
| *Phalacrocorax carbo* | **BIRD** | |
| *Phalacrocorax sulcirostris* | **BIRD** | |
| *Phalacrocorax varius* | **BIRD** | |
| *Phalaropus lobatus* | **BIRD** | **MI** |
| *Phaps histrionica* | **BIRD** | |
| *Philemon argenticeps* | **BIRD** | |
| *Philemon citreogularis* | **BIRD** | |
| *Philemon citreogularis* subsp. *citreogularis* | **BIRD** | |
| *Philomachus pugnax* | **BIRD** | **MI** |
| *Pitta moluccensis* | **BIRD** | |
| *Platalea flavipes* | **BIRD** | |
| *Platalea regia* | **BIRD** | |
| *Plegadis falcinellus* | **BIRD** | **MI** |
| *Pluvialis fulva* | **BIRD** | **MI** |
| *Pluvialis squatarola* | **BIRD** | **MI** |
| *Podargus strigoides* | **BIRD** | |
| *Poecilodryas superciliosa* | **BIRD** | |
| *Poecilodryas superciliosa* subsp. *cerviniventris* | **BIRD** | |
| *Poephila acuticauda* | **BIRD** | |
| *Poephila personata* | **BIRD** | |
| *Poliocephalus poliocephalus* | **BIRD** | |
| *Pomatostomus temporalis* | **BIRD** | |
| *Pomatostomus temporalis* subsp. *rubeculus* | **BIRD** | |
| *Porphyrio porphyrio* | **BIRD** | |
| *Porzana fluminea* | **BIRD** | |
| *Porzana pusilla* | **BIRD** | |
| *Porzana tabuensis* | **BIRD** | |
| *Psitteuteles versicolor* | **BIRD** | |
| *Ptilinopus regina* | **BIRD** | |
| *Ptilonorhynchus nuchalis* | **BIRD** | |
| *Ptilotula flavescens* subsp. *flavescens* | **BIRD** | |
| *Ramsayornis fasciatus* | **BIRD** | |
| *Recurvirostra novaehollandiae* | **BIRD** | |
| *Rhipidura albiscapa* | **BIRD** | |
| *Rhipidura leucophrys* | **BIRD** | |
| *Rhipidura phasiana* | **BIRD** | |
| *Rhipidura rufiventris* | **BIRD** | |
| *Rostratula australis* | **BIRD** | **EN** |
| *Scythrops novaehollandiae* | **BIRD** | |
| *Scythrops novaehollandiae* subsp. *novaehollandiae* | **BIRD** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Smicrornis brevirostris* | **BIRD** | |
| *Sphecotheres vieilloti* | **BIRD** | |
| *Sternula albifrons* | **BIRD** | **MI** |
| *Stiltia isabella* | **BIRD** | |
| *Tachybaptus novaehollandiae* | **BIRD** | |
| *Tadorna radjah* | **BIRD** | |
| *Taeniopygia bichenovii* | **BIRD** | |
| *Taeniopygia guttata* | **BIRD** | |
| *Threskiornis molucca* | **BIRD** | |
| *Threskiornis spinicollis* | **BIRD** | |
| *Todiramphus chloris* | **BIRD** | |
| *Todiramphus pyrrhopygius* | **BIRD** | |
| *Todiramphus sanctus* | **BIRD** | |
| *Todiramphus sanctus* subsp. *sanctus* | **BIRD** | |
| *Tribonyx ventralis* | **BIRD** | |
| *Trichoglossus haematodus* | **BIRD** | |
| *Trichoglossus haematodus* subsp. *rubritorquis* | **BIRD** | |
| *Tringa brevipes* | **BIRD** | **P4/MI** |
| *Tringa glareola* | **BIRD** | **MI** |
| *Tringa hypoleucos* | **BIRD** | |
| *Tringa nebularia* | **BIRD** | **MI** |
| *Tringa stagnatilis* | **BIRD** | **MI** |
| *Turnix maculosus* | **BIRD** | |
| *Turnix velox* | **BIRD** | |
| *Vanellus miles* | **BIRD** | |
| *Vanellus miles* subsp. *miles* | **BIRD** | |
| *Xema sabini* | **BIRD** | |
| *Xenus cinereus* | **BIRD** | |
| *Zosterops luteus* | **BIRD** | |
| *Amoya sp.* | **FISH** | |
| *Anodontiglanis dahli* | **FISH** | |
| *Boleophthalmus caeruleomaculatus* | **FISH** | |
| *Doryichthys deokhatoides* | **FISH** | |
| *Glossamia aprion* | **FISH** | |
| *Glossogobius giuris* | **FISH** | |
| *Glyphis garricki* | **FISH** | **P1** |
| *Lates calcarifer* | **FISH** | |
| *Lepturacanthus savala* | **FISH** | |
| *Netuma bilineata* | **FISH** | |
| *Oxyeleotris selheimi* | **FISH** | |
| *Periophthalmus argentilineatus* | **FISH** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Periophthalmus murdyi* | **FISH** | |
| *Periophthalmus novaeguineaensis* | **FISH** | |
| *Periophthalmus sp.* | **FISH** | |
| *Pristis zijsron* | **FISH** | |
| *Pseudogobius javanicus* | **FISH** | |
| *Rhinomugil nasutus* | **FISH** | |
| *Scartelaos histophorus* | **FISH** | |
| *Selenotoca multifasciata* | **FISH** | |
| *Taenioides mordax* | **FISH** | |
| *Trichiurus sp.* | **FISH** | |
| *Chaerephon jobensis* | **MAMMAL** | |
| *Chalinolobus gouldii* | **MAMMAL** | |
| *Chalinolobus nigrogriseus* | **MAMMAL** | |
| *Hipposideros stenotis* | **MAMMAL** | **P2** |
| *Macroderma gigas* | **MAMMAL** | **VU** |
| *Macropus agilis* | **MAMMAL** | |
| *Macropus sp.* | **MAMMAL** | |
| *Miniopterus schreibersii subsp. orianae* | **MAMMAL** | |
| *Mus musculus* | **MAMMAL** | |
| *Onychogalea unguifera* | **MAMMAL** | |
| *Orcaella brevirostris* | **MAMMAL** | |
| *Orcaella heinsohni* | **MAMMAL** | **P4** |
| *Peponocephala electra* | **MAMMAL** | |
| *Petrogale brachyotis* | **MAMMAL** | |
| *Pteropus alecto* | **MAMMAL** | |
| *Pteropus scapulatus* | **MAMMAL** | |
| *Pteropus sp.* | **MAMMAL** | |
| *Saccolaimus flaviventris* | **MAMMAL** | |
| *Scotorepens greyii* | **MAMMAL** | |
| *Taphozous georgianus* | **MAMMAL** | |
| *Amalosia rhombifer* | **REPTILE** | |
| *Antaresia childreni* | **REPTILE** | |
| *Antaresia stimsoni* subsp. *stimsoni* | **REPTILE** | |
| *Aspidites melanocephalus* | **REPTILE** | |
| *Brachyurophis roperi* | **REPTILE** | |
| *Chelonia mydas* | **REPTILE** | **VU** |
| *Chelosania brunnea* | **REPTILE** | |
| *Chlamydosaurus kingii* | **REPTILE** | |
| *Cryptoblepharus metallicus* | **REPTILE** | |
| *Cryptoblepharus ruber* | **REPTILE** | |
| *Cryptoblepharus tytthos* | **REPTILE** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Ctenotus inornatus* | **REPTILE** | |
| *Ctenotus pantherinus* subsp. *ocellifer* | **REPTILE** | |
| *Ctenotus saxatilis* | **REPTILE** | |
| *Ctenotus serventyi* | **REPTILE** | |
| *Demansia angusticeps* | **REPTILE** | |
| *Demansia papuensis* | **REPTILE** | |
| *Demansia psammophis* subsp. *cupreiceps* | **REPTILE** | |
| *Diplodactylus conspicillatus* | **REPTILE** | |
| *Diporiphora magna* | **REPTILE** | |
| *Diporiphora pindan* | **REPTILE** | |
| *Diporiphora sp.* | **REPTILE** | |
| *Ephalophis greyae* | **REPTILE** | |
| *Eremiascincus isolepis* | **REPTILE** | |
| *Fordonia leucobalia* | **REPTILE** | |
| *Furina ornata* | **REPTILE** | |
| *Gehyra australis* | **REPTILE** | |
| *Gehyra pilbara* | **REPTILE** | |
| *Heteronotia binoei* | **REPTILE** | |
| *Hydrelaps darwiniensis* | **REPTILE** | |
| *Lerista bipes* | **REPTILE** | |
| *Lerista greeri* | **REPTILE** | |
| *Lialis burtonis* | **REPTILE** | |
| *Liasis mackloti* subsp. *fuscus* | **REPTILE** | |
| *Menetia greyii* | **REPTILE** | |
| *Menetia maini* | **REPTILE** | |
| *Morethia ruficauda* subsp. *ruficauda* | **REPTILE** | |
| *Myron resetari* | **REPTILE** | |
| *Pogona minor* subsp. *mitchelli* | **REPTILE** | |
| *Pseudonaja mengdeni* | **REPTILE** | |
| *Ramphotyphlops diversus* | **REPTILE** | |
| *Ramphotyphlops grypus* | **REPTILE** | |
| *Simoselaps anomalus* | **REPTILE** | |
| *Strophurus ciliaris* subsp. *aberrans* | **REPTILE** | |
| *Suta punctata* | **REPTILE** | |
| *Tiliqua multifasciata* | **REPTILE** | |
| *Tiliqua scincoides* subsp. *intermedia* | **REPTILE** | **CR** |
| *Varanus brevicauda* | **REPTILE** | |
| *Varanus tristis* | **REPTILE** | |
| *Cyclorana australis* | **AMPHIBIAN** | |
| *Cyclorana cryptotis* | **AMPHIBIAN** | |
| *Cyclorana longipes* | **AMPHIBIAN** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Cyclorana sp.* | **AMPHIBIAN** | |
| *Cyclorana vagitus* | **AMPHIBIAN** | |
| *Litoria caerulea* | **AMPHIBIAN** | |
| *Litoria inermis* | **AMPHIBIAN** | |
| *Neobatrachus aquilonius* | **AMPHIBIAN** | |
| *Notaden nichollsi* | **AMPHIBIAN** | |
| *Platyplectrum ornatum* | **AMPHIBIAN** | |
| *Uperoleia aspera* | **AMPHIBIAN** | |
| *Uperoleia mjobergii* | **AMPHIBIAN** | |
| *Uperoleia talpa* | **AMPHIBIAN** | |



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*Terrestrial Flora Nature Map Desktop Result for Derby*

| TAXON | CLASS | CONS |
|---|---|---|
| *Abrus precatorius* subsp. *precatorius* | **DICOT** | |
| *Abutilon hannii* | **DICOT** | |
| *Abutilon otocarpum* | **DICOT** | |
| *Acacia colei* | **DICOT** | |
| *Acacia monticola* | **DICOT** | |
| *Acacia platycarpa* | **DICOT** | |
| *Acacia tumida* | **DICOT** | |
| *Acacia tumida* var. *tumida* | **DICOT** | |
| *Achyranthes aspera* | **DICOT** | |
| *Adansonia gregorii* | **DICOT** | |
| *Aegialitis annulata* | **DICOT** | |
| *Aegiceras corniculatum* | **DICOT** | |
| *Aerva javanica* | **DICOT** | |
| *Aeschynomene indica* | **DICOT** | |
| *Alternanthera angustifolia* | **DICOT** | |
| *Alternanthera pungens* | **DICOT** | |
| *Amaranthus pallidiflorus* | **DICOT** | |
| *Amaranthus undulatus* | **DICOT** | |
| *Amyema bifurcata* | **DICOT** | |
| *Amyema thalassia* | **DICOT** | |
| *Amyema villiflora* subsp. *villiflora* | **DICOT** | |
| *Asystasia gangetica* subsp. *gangetica* | **DICOT** | |
| *Atalaya hemiglauca* | **DICOT** | |
| *Avicennia marina* | **DICOT** | |
| *Barleria lupulina* | **DICOT** | |
| *Barleria prionitis* | **DICOT** | |
| *Basella sp.* | **DICOT** | |
| *Batis argillicola* | **DICOT** | |
| *Bauhinia cunninghamii* | **DICOT** | |
| *Boerhavia coccinea* | **DICOT** | |
| *Boerhavia gardneri* | **DICOT** | |
| *Bonamia linearis* | **DICOT** | |
| *Bonamia media* | **DICOT** | |
| *Bonamia pannosa* | **DICOT** | |
| *Brachychiton diversifolius* subsp. *diversifolius* | **DICOT** | |
| *Bruguiera exaristata* | **DICOT** | |
| *Buchnera ramosissima* | **DICOT** | |
| *Byblis filifolia* | **DICOT** | |
| *Byblis liniflora* | **DICOT** | |
| *Calandrinia tepperiana* | **DICOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Calotropis gigantea* | **DICOT** | |
| *Calytrix exstipulata* | **DICOT** | |
| *Capparis lasiantha* | **DICOT** | |
| *Capparis umbonata* | **DICOT** | |
| *Carissa lanceolata* | **DICOT** | |
| *Cassytha capillaris* | **DICOT** | |
| *Cassytha filiformis* | **DICOT** | |
| *Chamaecrista mimosoides* | **DICOT** | |
| *Chamaecrista rotundifolia* | **DICOT** | |
| *Cleome tetrandra* var. *tetrandra* | **DICOT** | |
| *Cleome viscosa* | **DICOT** | |
| *Cochlospermum fraseri* | **DICOT** | |
| *Corchorus aestuans* | **DICOT** | |
| *Corchorus olitorius* | **DICOT** | |
| *Corchorus sidoides* | **DICOT** | |
| *Corchorus sidoides* subsp. *sidoides* | **DICOT** | |
| *Corchorus tridens* | **DICOT** | |
| *Corymbia bella* | **DICOT** | |
| *Corymbia cadophora* subsp. *cadophora* | **DICOT** | |
| *Corymbia ferriticola* | **DICOT** | |
| *Corymbia flavescens* | **DICOT** | |
| *Corymbia greeniana* | **DICOT** | |
| *Corymbia polycarpa* | **DICOT** | |
| *Corymbia zygophylla* | **DICOT** | |
| *Cressa australis* | **DICOT** | |
| *Crotalaria brevis* | **DICOT** | |
| *Crotalaria cunninghamii* | **DICOT** | |
| *Crotalaria mysorensis* | **DICOT** | |
| *Crotalaria novae-hollandiae* subsp. *novaehollandiae* | **DICOT** | |
| *Crotalaria ramosissima* | **DICOT** | |
| *Cryptostegia madagascariensis* | **DICOT** | |
| *Cylindropuntia fulgida* var. *mamillata* | **DICOT** | |
| *Datura inoxia* | **DICOT** | |
| *Dendrophthoe acacioides* subsp. *acacioides* | **DICOT** | |
| *Dentella misera* | **DICOT** | |
| *Desmodium filiforme* | **DICOT** | |
| *Dicliptera armata* | **DICOT** | |
| *Dodonaea hispidula* var. *arida* | **DICOT** | |
| *Drosera derbyensis* | **DICOT** | |
| *Drosera finlaysoniana* | **DICOT** | |
| *Drosera hartmeyerorum* | **DICOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Ehretia saligna* var. *saligna* | **DICOT** | |
| *Eremophila bignoniiflora* | **DICOT** | |
| *Erythrophleum chlorostachys* | **DICOT** | |
| *Eucalyptus miniata* | **DICOT** | |
| *Eucalyptus tectifica* | **DICOT** | |
| *Euphorbia australis* var. *subtomentosa* | **DICOT** | |
| *Euphorbia bifida* | **DICOT** | |
| *Euphorbia hassallii* | **DICOT** | |
| *Euphorbia heterophylla* | **DICOT** | |
| *Euphorbia hirta* | **DICOT** | |
| *Euphorbia mitchelliana* var. *mitchelliana* | **DICOT** | |
| *Euphorbia psilosperma* | **DICOT** | |
| *Euphorbia schultzii* var. *comans* | **DICOT** | |
| *Euphorbia schultzii* var. *schultzii* | **DICOT** | |
| *Euphorbia trigonosperma* | **DICOT** | |
| *Euphorbia vaccaria* var. *vaccaria* | **DICOT** | |
| *Evolvulus alsinoides* var. *decumbens* | **DICOT** | |
| *Excoecaria agallocha* | **DICOT** | |
| *Excoecaria ovalis* | **DICOT** | |
| *Ficus aculeata* var. *indecora* | **DICOT** | |
| *Flueggea virosa* subsp. *melanthesoides* | **DICOT** | |
| *Galactia tenuiflora* | **DICOT** | |
| *Gardenia pyriformis* subsp. *keartlandii* | **DICOT** | |
| *Glinus oppositifolius* | **DICOT** | |
| *Gomphrena brachystylis* subsp. *pindanensis* | **DICOT** | |
| *Gomphrena canescens* subsp. *canescens* | **DICOT** | |
| *Gomphrena celosioides* | **DICOT** | |
| *Gomphrena cucullata* | **DICOT** | **P3** |
| *Gomphrena flaccida* | **DICOT** | |
| *Gomphrena leptoclada* subsp. *leptoclada* | **DICOT** | |
| *Gomphrena tenella* | **DICOT** | |
| *Goodenia armitiana* | **DICOT** | |
| *Goodenia lamprosperma* | **DICOT** | |
| *Goodenia sepalosa* var. *sepalosa* | **DICOT** | |
| *Goodenia sp.* | **DICOT** | |
| *Gossypium australe* | **DICOT** | |
| *Grevillea pyramidalis* | **DICOT** | |
| *Grevillea pyramidalis* subsp. *pyramidalis* | **DICOT** | |
| *Grevillea striata* | **DICOT** | |
| *Grevillea wickhamii* subsp. *aprica* | **DICOT** | |
| *Grevillea wickhamii* subsp. *macrodonta* | **DICOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Grewia breviflora* | **DICOT** | |
| *Gyrocarpus americanus* subsp. *pachyphyllus* | **DICOT** | |
| *Hakea arborescens* | **DICOT** | |
| *Hakea chordophylla* | **DICOT** | |
| *Hakea macrocarpa* | **DICOT** | |
| *Heliotropium cunninghamii* | **DICOT** | |
| *Heliotropium diversifolium* | **DICOT** | |
| *Heliotropium foliatum* | **DICOT** | |
| *Heliotropium leptaleum* | **DICOT** | |
| *Heliotropium paniculatum* | **DICOT** | |
| *Heliotropium sp.* | **DICOT** | |
| *Hibiscus apodus* | **DICOT** | |
| *Hibiscus geranioides* | **DICOT** | |
| *Hibiscus leptocladus* | **DICOT** | |
| *Hybanthus aurantiacus* | **DICOT** | |
| *Hybanthus enneaspermus* subsp. *enneaspermus* | **DICOT** | |
| *Indigofera hirsuta* | **DICOT** | |
| *Indigofera linifolia* | **DICOT** | |
| *Indigofera linnaei* | **DICOT** | |
| *Indigofera trita* | **DICOT** | |
| *Ipomoea alba* | **DICOT** | |
| *Ipomoea coptica* | **DICOT** | |
| *Ipomoea muelleri* | **DICOT** | |
| *Ipomoea polymorpha* | **DICOT** | |
| *Ipomoea quamoclit* | **DICOT** | |
| *Jasminum molle* | **DICOT** | |
| *Jatropha gossypiifolia* | **DICOT** | |
| *Josephinia papillosa* | **DICOT** | |
| *Kennedia prorepens* | **DICOT** | |
| *Leucaena leucocephala* subsp. *leucocephala* | **DICOT** | |
| *Ludwigia perennis* | **DICOT** | |
| *Lysiana spathulata* subsp. *spathulata* | **DICOT** | |
| *Mallotus nesophilus* | **DICOT** | |
| *Marsdenia angustata* | **DICOT** | |
| *Marsdenia viridiflora* subsp. *tropica* | **DICOT** | |
| *Melaleuca alsophila* | **DICOT** | |
| *Melaleuca nervosa* | **DICOT** | |
| *Melaleuca nervosa* subsp. *crosslandiana* | **DICOT** | |
| *Melaleuca viridiflora* | **DICOT** | |
| *Microstachys chamaelea* | **DICOT** | |
| *Momordica balsamina* | **DICOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Nelsonia campestris* | **DICOT** | |
| *Neobassia astrocarpa* | **DICOT** | |
| *Neptunia dimorphantha* | **DICOT** | |
| *Neptunia monosperma* | **DICOT** | |
| *Nymphoides beaglensis* | **DICOT** | **P3** |
| *Ocimum basilicum* | **DICOT** | |
| *Osbornia octodonta* | **DICOT** | |
| *Passiflora foetida* var. *hispida* | **DICOT** | |
| *Petalostigma pubescens* | **DICOT** | |
| *Phyllanthus amarus* | **DICOT** | |
| *Phyllanthus ciccoides* | **DICOT** | |
| *Phyllanthus exilis* | **DICOT** | |
| *Phyllanthus trachygyne* | **DICOT** | |
| *Physalis angulata* | **DICOT** | |
| *Planchonia careya* | **DICOT** | |
| *Pluchea rubelliflora* | **DICOT** | |
| *Plumbago zeylanica* | **DICOT** | |
| *Polycarpaea corymbosa* | **DICOT** | |
| *Polycarpaea longiflora* | **DICOT** | |
| *Polygala tepperi* | **DICOT** | |
| *Portulaca filifolia* | **DICOT** | |
| *Portulaca oleracea* | **DICOT** | |
| *Portulaca pilosa* | **DICOT** | |
| *Portulaca sp.* | **DICOT** | |
| *Prosopis pallida* | **DICOT** | |
| *Psydrax pendulina* | **DICOT** | |
| *Ptilotus corymbosus* | **DICOT** | |
| *Ptilotus fusiformis* | **DICOT** | |
| *Ptilotus lanatus* | **DICOT** | |
| *Ptilotus spicatus* | **DICOT** | |
| *Rhynchosia rostrata* | **DICOT** | **P1** |
| *Salsola australis* | **DICOT** | |
| *Sclerolaena bicornis* var. *bicornis* | **DICOT** | |
| *Sclerolaena glabra* | **DICOT** | |
| *Senna costata* | **DICOT** | |
| *Senna glutinosa* subsp. *pruinosa* | **DICOT** | |
| *Senna obtusifolia* | **DICOT** | |
| *Sesbania cannabina* | **DICOT** | |
| *Sesbania formosa* | **DICOT** | |
| *Sesuvium portulacastrum* | **DICOT** | |
| *Sida rohlenae* subsp. *occidentalis* | **DICOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Sida spinosa* | **DICOT** | |
| *Solanum cunninghamii* | **DICOT** | |
| *Solanum dioicum* | **DICOT** | |
| *Solanum lucani* | **DICOT** | |
| *Solanum melongena* | **DICOT** | |
| *Spermacoce breviflora* | **DICOT** | |
| *Spermacoce occidentalis* | **DICOT** | |
| *Stemodia lythrifolia* | **DICOT** | |
| *Streptoglossa odora* | **DICOT** | |
| *Striga curviflora* | **DICOT** | |
| *Striga squamigera* | **DICOT** | |
| *Strobilanthes alternata* | **DICOT** | |
| *Stylosanthes hamata* | **DICOT** | |
| *Stylosanthes humilis* | **DICOT** | |
| *Stylosanthes scabra* | **DICOT** | |
| *Suaeda arbusculoides* | **DICOT** | |
| *Tecticornia halocnemoides* | **DICOT** | |
| *Tecticornia indica* subsp. *indica* | **DICOT** | |
| *Tecticornia indica* subsp. *julacea* | **DICOT** | |
| *Tecticornia indica* subsp. *leiostachya* | **DICOT** | |
| *Tecticornia pergranulata* | **DICOT** | |
| *Tecticornia pergranulata* subsp. *pergranulata* | **DICOT** | |
| *Tecticornia verrucosa* | **DICOT** | |
| *Tephrosia leptoclada* | **DICOT** | |
| *Tephrosia remotiflora* | **DICOT** | |
| *Tephrosia sp. D Kimberley Flora (R.D. Royce 1848)* | **DICOT** | |
| *Tinospora smilacina* | **DICOT** | |
| *Trianthema oxycalyptrum* var. *oxycalyptrum* | **DICOT** | |
| *Trianthema pilosum* | **DICOT** | |
| *Trianthema triquetrum* | **DICOT** | |
| *Tribulopis angustifolia* | **DICOT** | |
| *Tribulus occidentalis* | **DICOT** | |
| *Tribulus terrestris* | **DICOT** | |
| *Trichodesma zeylanicum* | **DICOT** | |
| *Triumfetta johnstonii* | **DICOT** | |
| *Triumfetta plumigera* | **DICOT** | |
| *Vachellia suberosa* | **DICOT** | |
| *Velleia panduriformis* | **DICOT** | |
| *Waltheria indica* | **DICOT** | |
| *Wrightia saligna* | **DICOT** | |
| *Xenostegia tridentata* | **DICOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Xylocarpus moluccensis* | **DICOT** | |
| *Ziziphus mauritiana* | **DICOT** | |
| *Zornia chaetophora* | **DICOT** | |
| *Zornia muelleriana* subsp. *congesta* | **DICOT** | |
| *Cycas pruinosa* | **GYMNO** | |
| *Aristida hygrometrica* | **MONOCOT** | |
| *Aristida inaequiglumis* | **MONOCOT** | |
| *Bulbostylis barbata* | **MONOCOT** | |
| *Cenchrus biflorus* | **MONOCOT** | |
| *Cenchrus ciliaris* | **MONOCOT** | |
| *Cenchrus pedicellatus* | **MONOCOT** | |
| *Cenchrus pedicellatus* subsp. *unispiculus* | **MONOCOT** | |
| *Cenchrus purpureus* | **MONOCOT** | |
| *Cenchrus setiger* | **MONOCOT** | |
| *Chloris barbata* | **MONOCOT** | |
| *Chloris gayana* | **MONOCOT** | |
| *Chrysopogon pallidus* | **MONOCOT** | |
| *Cymbopogon bombycinus* | **MONOCOT** | |
| *Cymbopogon citratus* | **MONOCOT** | |
| *Cynodon convergens* | **MONOCOT** | |
| *Cynodon dactylon* | **MONOCOT** | |
| *Cyperus blakeanus* | **MONOCOT** | |
| *Cyperus brevifolius* | **MONOCOT** | |
| *Cyperus bulbosus* | **MONOCOT** | |
| *Cyperus carinatus* | **MONOCOT** | |
| *Cyperus compressus* | **MONOCOT** | |
| *Cyperus conicus* | **MONOCOT** | |
| *Cyperus rotundus* | **MONOCOT** | |
| *Cyperus scariosus* | **MONOCOT** | |
| *Cyperus sp.* | **MONOCOT** | |
| *Cyperus squarrosus* | **MONOCOT** | |
| *Dactyloctenium aegyptium* | **MONOCOT** | |
| *Dactyloctenium radulans* | **MONOCOT** | |
| *Dichanthium fecundum* | **MONOCOT** | |
| *Dichanthium sericeum* subsp. *sericeum* | **MONOCOT** | |
| *Digitaria bicornis* | **MONOCOT** | |
| *Digitaria ciliaris* | **MONOCOT** | |
| *Digitaria didactyla* | **MONOCOT** | |
| *Dinebra neesii* | **MONOCOT** | |
| *Diplachne fusca* subsp. *fusca* | **MONOCOT** | |
| *Echinochloa colona* | **MONOCOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Ectrosia leporina* | **MONOCOT** | |
| *Ectrosia schultzii* | **MONOCOT** | |
| *Eleusine indica* | **MONOCOT** | |
| *Eragrostis cilianensis* | **MONOCOT** | |
| *Eragrostis cumingii* | **MONOCOT** | |
| *Eragrostis fallax* | **MONOCOT** | |
| *Eragrostis tenellula* | **MONOCOT** | |
| *Eriachne benthamii* | **MONOCOT** | |
| *Eriachne ciliata* | **MONOCOT** | |
| *Eriachne melicacea* | **MONOCOT** | |
| *Eriachne obtusa* | **MONOCOT** | |
| *Eriachne pindanica* | **MONOCOT** | |
| *Eriochloa fatmensis* | **MONOCOT** | **P3** |
| *Eriochloa sp.* | **MONOCOT** | |
| *Fimbristylis caespitosa* | **MONOCOT** | |
| *Fimbristylis crosslandii* | **MONOCOT** | |
| *Fimbristylis cymosa* | **MONOCOT** | |
| *Fimbristylis neilsonii* | **MONOCOT** | |
| *Fimbristylis punctata* | **MONOCOT** | |
| *Fimbristylis rara* | **MONOCOT** | |
| *Haemodorum gracile* | **MONOCOT** | |
| *Heteropogon contortus* | **MONOCOT** | |
| *Iseilema vaginiflorum* | **MONOCOT** | |
| *Megathyrsus maximus* | **MONOCOT** | |
| *Murdannia graminea* | **MONOCOT** | |
| *Panicum decompositum* | **MONOCOT** | |
| *Panicum laevinode* | **MONOCOT** | |
| *Panicum mindanaense* | **MONOCOT** | |
| *Paspalidium rarum* | **MONOCOT** | |
| *Perotis rara* | **MONOCOT** | |
| *Rhynchospora affinis* | **MONOCOT** | |
| *Schizachyrium fragile* | **MONOCOT** | |
| *Scleria sp.* | **MONOCOT** | |
| *Sehima nervosum* | **MONOCOT** | |
| *Setaria apiculata* | **MONOCOT** | |
| *Setaria surgens* | **MONOCOT** | |
| *Sorghum stipoideum* | **MONOCOT** | |
| *Sporobolus actinocladus* | **MONOCOT** | |
| *Sporobolus virginicus* | **MONOCOT** | |
| *Stipa sp.* | **MONOCOT** | |
| *Thaumastochloa major* | **MONOCOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Themeda avenacea* | **MONOCOT** | |
| *Themeda quadrivalvis* | **MONOCOT** | |
| *Triodia basedowii* | **MONOCOT** | |
| *Triodia caelestialis* | **MONOCOT** | |
| *Triodia epactia* | **MONOCOT** | |
| *Triodia pungens* | **MONOCOT** | |
| *Urochloa mosambicensis* | **MONOCOT** | |
| *Urochloa piligera* | **MONOCOT** | |
| *Urochloa subquadripara* | **MONOCOT** | |
| *Whiteochloa cymbiformis* | **MONOCOT** | |
| *Xerochloa barbata* | **MONOCOT** | |
| *Xerochloa imberbis* | **MONOCOT** | |
| *Xerochloa laniflora* | **MONOCOT** | |
| *Yakirra australiensis* | **MONOCOT** | |
| *Yakirra australiensis* var. *australiensis* | **MONOCOT** | |
| *Eriachne melicacea* | **MONOCOT** | |



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*Vertebrate Fauna Nature Map Desktop Result – Broome*

| TAXON | CLASS | CONS |
|---|---|---|
| *Acanthagenys rufogularis* | **BIRD** | |
| *Acanthiza apicalis* | **BIRD** | |
| *Accipiter cirrocephalus* | **BIRD** | |
| *Accipiter cirrocephalus* subsp. *cirrocephalus* | **BIRD** | |
| *Accipiter fasciatus* | **BIRD** | |
| *Accipiter fasciatus* subsp. *didimus* | **BIRD** | |
| *Accipiter fasciatus* subsp. *fasciatus* | **BIRD** | |
| *Accipiter novaehollandiae* | **BIRD** | |
| *Acrocephalus australis* | **BIRD** | |
| *Actitis hypoleucos* | **BIRD** | |
| *Aegotheles cristatus* | **BIRD** | **MI** |
| *Amaurornis cinerea* | **BIRD** | |
| *Anas castanea* | **BIRD** | |
| *Anas gracilis* | **BIRD** | |
| *Anas platyrhynchos* subsp. *domesticus* | **BIRD** | |
| *Anas querquedula* | **BIRD** | **MI** |
| *Anas rhynchotis* | **BIRD** | |
| *Anas superciliosa* | **BIRD** | |
| *Anhinga melanogaster* subsp. *novaehollandiae* | **BIRD** | |
| *Anhinga novaehollandiae* | **BIRD** | |
| *Anous stolidus* | **BIRD** | **MI** |
| *Anous stolidus* subsp. *pileatus* | **BIRD** | |
| *Anseranas semipalmata* | **BIRD** | |
| *Anthus cervinus* | **BIRD** | |
| *Aprosmictus erythropterus* | **BIRD** | |
| *Apus pacificus* | **BIRD** | **MI** |
| *Apus pacificus* subsp. *pacificus* | **BIRD** | |
| *Aquila audax* | **BIRD** | |
| *Aquila morphnoides* | **BIRD** | |
| *Aquila morphnoides* subsp. *morphnoides* | **BIRD** | |
| *Ardea alba* | **BIRD** | |
| *Ardea garzetta* subsp. *nigripes* | **BIRD** | |
| *Ardea ibis* | **BIRD** | |
| *Ardea intermedia* | **BIRD** | |
| *Ardea intermedia* subsp. *intermedia* | **BIRD** | |
| *Ardea modesta* | **BIRD** | |
| *Ardea novaehollandiae* | **BIRD** | |
| *Ardea pacifica* | **BIRD** | |
| *Ardea sacra* | **BIRD** | |
| *Ardea sacra* subsp. *sacra* | **BIRD** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Ardea sp.* | **BIRD** | |
| *Ardea sumatrana* | **BIRD** | |
| *Ardenna pacifica* | **BIRD** | **MI** |
| *Ardenna tenuirostris* | **BIRD** | **MI** |
| *Ardeotis australis* | **BIRD** | |
| *Arenaria interpres* | **BIRD** | **MI** |
| *Arenaria interpres* subsp. *interpres* | **BIRD** | |
| *Artamus cinereus* | **BIRD** | |
| *Artamus leucorynchus* | **BIRD** | |
| *Artamus leucorynchus* subsp. *leucopygialis* | **BIRD** | |
| *Artamus minor* | **BIRD** | |
| *Artamus personatus* | **BIRD** | |
| *Artamus superciliosus* | **BIRD** | |
| *Aviceda subcristata* | **BIRD** | |
| *Aythya australis* | **BIRD** | |
| *Bulweria bulwerii* | **BIRD** | **MI** |
| *Burhinus grallarius* | **BIRD** | |
| *Butorides striata* | **BIRD** | |
| *Butorides striatus* | **BIRD** | |
| *Butorides striatus* subsp. *stagnatilis* | **BIRD** | |
| *Cacatua galerita* | **BIRD** | |
| *Cacatua roseicapilla* subsp. *roseicapilla* | **BIRD** | |
| *Cacatua sanguinea* | **BIRD** | |
| *Cacatua sanguinea* subsp. *sanguinea* | **BIRD** | |
| *Cacomantis pallidus* | **BIRD** | |
| *Cacomantis variolosus* | **BIRD** | |
| *Calidris acuminata* | **BIRD** | **MI** |
| *Calidris alba* | **BIRD** | **MI** |
| *Calidris canutus* | **BIRD** | **EN** |
| *Calidris canutus* subsp. *rogersi* | **BIRD** | |
| *Calidris ferruginea* | **BIRD** | **CR** |
| *Calidris melanotos* | **BIRD** | **MI** |
| *Calidris minuta* | **BIRD** | |
| *Calidris ruficollis* | **BIRD** | **MI** |
| *Calidris subminuta* | **BIRD** | **MI** |
| *Calidris tenuirostris* | **BIRD** | **CR** |
| *Calonectris leucomelas* | **BIRD** | **MI** |
| *Calyptorhynchus banksii* | **BIRD** | **VU** |
| *Cecropis daurica* | **BIRD** | **MI** |
| *Centropus phasianinus* | **BIRD** | |
| *Centropus phasianinus* subsp. *phasianinus* | **BIRD** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Certhionyx variegatus* | **BIRD** | |
| *Charadrius dubius* | **BIRD** | **MI** |
| *Charadrius leschenaultii* | **BIRD** | **VU** |
| *Charadrius leschenaultii* subsp. *leschenaultii* | **BIRD** | |
| *Charadrius melanops* | **BIRD** | |
| *Charadrius mongolus* | **BIRD** | **EN** |
| *Charadrius mongolus* subsp. *mongolus* | **BIRD** | |
| *Charadrius ruficapillus* | **BIRD** | |
| *Charadrius veredus* | **BIRD** | **MI** |
| *Chenonetta jubata* | **BIRD** | |
| *Cheramoeca leucosterna* | **BIRD** | |
| *Chlidonias leucopterus* | **BIRD** | **MI** |
| *Chroicocephalus novaehollandiae* | **BIRD** | |
| *Chrysococcyx basalis* | **BIRD** | |
| *Chrysococcyx minutillus* subsp. *minutillus* | **BIRD** | |
| *Chrysococcyx osculans* | **BIRD** | |
| *Cincloramphus cruralis* | **BIRD** | |
| *Cincloramphus mathewsi* | **BIRD** | |
| *Circus approximans* | **BIRD** | |
| *Circus assimilis* | **BIRD** | |
| *Cissomela pectoralis* | **BIRD** | |
| *Cisticola exilis* | **BIRD** | |
| *Cisticola exilis* subsp. *exilis* | **BIRD** | |
| *Cladorhynchus leucocephalus* | **BIRD** | |
| *Climacteris melanura* | **BIRD** | |
| *Climacteris melanura* subsp. *melanura* | **BIRD** | |
| *Colluricincla harmonica* | **BIRD** | |
| *Columba livia* | **BIRD** | |
| *Conopophila rufogularis* | **BIRD** | |
| *Coracina novaehollandiae* | **BIRD** | |
| *Coracina papuensis* | **BIRD** | |
| *Corvus bennetti* | **BIRD** | |
| *Corvus orru* | **BIRD** | |
| *Corvus orru* subsp. *cecilae* | **BIRD** | |
| *Coturnix pectoralis* | **BIRD** | |
| *Coturnix ypsilophora* | **BIRD** | |
| *Coturnix ypsilophora* subsp. *cervina* | **BIRD** | |
| *Cracticus nigrogularis* | **BIRD** | |
| *Cracticus tibicen* | **BIRD** | |
| *Cracticus torquatus* | **BIRD** | |
| *Cuculus optatus* | **BIRD** | **MI** |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Cuculus pallidus* | **BIRD** | |
| *Cuculus saturatus* subsp. *optatus* | **BIRD** | |
| *Cyanoptila cyanomelana* | **BIRD** | |
| *Cygnus atratus* | **BIRD** | |
| *Dacelo leachii* | **BIRD** | |
| *Dacelo leachii* subsp. *leachii* | **BIRD** | |
| *Daphoenositta chrysoptera* | **BIRD** | |
| *Dendrocygna arcuata* | **BIRD** | |
| *Dendrocygna eytoni* | **BIRD** | |
| *Dicaeum hirundinaceum* | **BIRD** | |
| *Dromaius novaehollandiae* | **BIRD** | |
| *Ducula bicolor* | **BIRD** | |
| *Egretta garzetta* | **BIRD** | |
| *Egretta novaehollandiae* | **BIRD** | |
| *Egretta picata* | **BIRD** | |
| *Egretta sacra* | **BIRD** | |
| *Elanus axillaris* | **BIRD** | |
| *Elanus caeruleus* | **BIRD** | |
| *Elanus caeruleus* subsp. *axillaris* | **BIRD** | |
| *Elanus scriptus* | **BIRD** | **P4** |
| *Elseyornis melanops* | **BIRD** | |
| *Emblema pictum* | **BIRD** | |
| *Eolophus roseicapillus* | **BIRD** | |
| *Ephippiorhynchus asiaticus* | **BIRD** | |
| *Epthianura crocea* | **BIRD** | |
| *Epthianura tricolor* | **BIRD** | |
| *Erythrogonys cinctus* | **BIRD** | |
| *Erythrura gouldiae* | **BIRD** | **P4** |
| *Esacus magnirostris* | **BIRD** | |
| *Eurostopodus argus* | **BIRD** | |
| *Eurystomus orientalis* | **BIRD** | |
| *Eurystomus orientalis* subsp. *pacificus* | **BIRD** | |
| *Falco berigora* | **BIRD** | |
| *Falco berigora* subsp. *berigora* | **BIRD** | |
| *Falco cenchroides* | **BIRD** | |
| *Falco cenchroides* subsp. *cenchroides* | **BIRD** | |
| *Falco hypoleucos* | **BIRD** | **VU** |
| *Falco longipennis* | **BIRD** | |
| *Falco longipennis* subsp. *longipennis* | **BIRD** | |
| *Falco peregrinus* | **BIRD** | **OS** |
| *Falco subniger* | **BIRD** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Fregata ariel* | **BIRD** | **MI** |
| *Fregata minor* | **BIRD** | **MI** |
| *Fulica atra* | **BIRD** | |
| *Gallinago megala* | **BIRD** | **MI** |
| *Gallinago stenura* | **BIRD** | **MI** |
| *Gallirallus philippensis* | **BIRD** | |
| *Gallirallus philippensis* subsp. *mellori* | **BIRD** | |
| *Gavicalis virescens* | **BIRD** | |
| *Gelochelidon nilotica* | **BIRD** | **MI** |
| *Geopelia cuneata* | **BIRD** | |
| *Geopelia humeralis* | **BIRD** | |
| *Geopelia placida* | **BIRD** | |
| *Geopelia striata* | **BIRD** | |
| *Geopelia striata* subsp. *placida* | **BIRD** | |
| *Geophaps plumifera* | **BIRD** | |
| *Gerygone fusca* | **BIRD** | |
| *Gerygone levigaster* | **BIRD** | |
| *Gerygone levigaster* subsp. *levigaster* | **BIRD** | |
| *Gerygone olivacea* | **BIRD** | |
| *Gerygone tenebrosa* | **BIRD** | |
| *Glareola maldivarum* | **BIRD** | **MI** |
| *Grallina cyanoleuca* | **BIRD** | |
| *Grus rubicunda* | **BIRD** | |
| *Haematopus fuliginosus* | **BIRD** | |
| *Haematopus longirostris* | **BIRD** | |
| *Haliaeetus leucogaster* | **BIRD** | |
| *Haliastur indus* | **BIRD** | |
| *Haliastur indus* subsp. *girrenera* | **BIRD** | |
| *Haliastur sphenurus* | **BIRD** | |
| *Hamirostra isura* | **BIRD** | |
| *Hamirostra melanosternon* | **BIRD** | |
| *Heteromunia pectoralis* | **BIRD** | |
| *Heteroscelus brevipes* | **BIRD** | |
| *Hieraaetus morphnoides* | **BIRD** | |
| *Himantopus himantopus* | **BIRD** | |
| *Himantopus himantopus* subsp. *leucocephalus* | **BIRD** | |
| *Hirundapus caudacutus* | **BIRD** | **MI** |
| *Hirundo neoxena* | **BIRD** | |
| *Hirundo nigricans* | **BIRD** | |
| *Hirundo nigricans* subsp. *nigricans* | **BIRD** | |
| *Hirundo rustica* | **BIRD** | **MI** |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Hydroprogne caspia* | **BIRD** | **MI** |
| *Irediparra gallinacea* | **BIRD** | |
| *Ixobrychus dubius* | **BIRD** | **P4** |
| *Ixobrychus flavicollis* subsp. *australis (southwest subpop.)* | **BIRD** | |
| *Ixobrychus minutus* | **BIRD** | |
| *Lalage tricolor* | **BIRD** | |
| *Larus fuscus* | **BIRD** | |
| *Larus novaehollandiae* | **BIRD** | |
| *Larus novaehollandiae* subsp. *novaehollandiae* | **BIRD** | |
| *Lichenostomus flavescens* | **BIRD** | |
| *Lichenostomus flavescens subsp. flavescens* | **BIRD** | |
| *Lichenostomus keartlandi* | **BIRD** | |
| *Lichenostomus unicolor* | **BIRD** | |
| *Lichenostomus virescens* | **BIRD** | |
| *Lichmera indistincta* | **BIRD** | |
| *Lichmera indistincta* subsp. *indistincta* | **BIRD** | |
| *Limicola falcinellus* | **BIRD** | **MI** |
| *Limicola falcinellus* subsp. *sibiricus* | **BIRD** | |
| *Limnodromus semipalmatus* | **BIRD** | **MI** |
| *Limosa lapponica* | **BIRD** | **MI** |
| *Limosa lapponica* subsp. *menzbieri* | **BIRD** | **CR** |
| *Limosa limosa* | **BIRD** | **MI** |
| *Limosa limosa* subsp. *melanuroides* | **BIRD** | |
| *Lonchura castaneothorax* | **BIRD** | |
| *Lophoictinia isura* | **BIRD** | |
| *Macronectes halli* | **BIRD** | **MI** |
| *Malacorhynchus membranaceus* | **BIRD** | |
| *Malurus lamberti* | **BIRD** | |
| *Malurus lamberti* subsp. *assimilis* | **BIRD** | |
| *Malurus melanocephalus* | **BIRD** | |
| *Malurus melanocephalus* subsp. *cruentatus* | **BIRD** | |
| *Manorina flavigula* | **BIRD** | |
| *Megalurus gramineus* | **BIRD** | |
| *Megalurus timoriensis* | **BIRD** | |
| *Melanodryas cucullata* | **BIRD** | |
| *Melithreptus albogularis* | **BIRD** | |
| *Melithreptus gularis* | **BIRD** | |
| *Melopsittacus undulatus* | **BIRD** | |
| *Merops ornatus* | **BIRD** | |
| *Microcarbo melanoleucos* | **BIRD** | |
| *Microeca fascinans* | **BIRD** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Microeca flavigaster* | **BIRD** | |
| *Microeca flavigaster* subsp. *tormenti* | **BIRD** | |
| *Milvus migrans* | **BIRD** | |
| *Milvus migrans* subsp. *affinis* | **BIRD** | |
| *Mirafra javanica* | **BIRD** | |
| *Mirafra javanica* subsp. *horsfieldii* | **BIRD** | |
| *Motacilla alba* | **BIRD** | |
| *Motacilla cinerea* | **BIRD** | **MI** |
| *Motacilla flava* | **BIRD** | **MI** |
| *Myiagra inquieta* | **BIRD** | |
| *Myiagra inquieta* subsp. *nana* | **BIRD** | |
| *Myiagra nana* | **BIRD** | |
| *Myiagra rubecula* | **BIRD** | |
| *Myiagra ruficollis* | **BIRD** | |
| *Myiagra ruficollis* subsp. *mimikae* | **BIRD** | |
| *Myzomela erythrocephala* | **BIRD** | |
| *Myzomela erythrocephala* subsp. *erythrocephala* | **BIRD** | |
| *Neochmia phaeton* | **BIRD** | |
| *Neochmia ruficauda* | **BIRD** | |
| *Nettapus pulchellus* | **BIRD** | |
| *Ninox boobook* subsp. *boobook* | **BIRD** | |
| *Ninox connivens* | **BIRD** | |
| *Ninox connivens* subsp. *connivens* | **BIRD** | **P3** |
| *Ninox novaeseelandiae* | **BIRD** | |
| *Ninox novaeseelandiae* subsp. *boobook* | **BIRD** | |
| *Numenius madagascariensis* | **BIRD** | **CR** |
| *Numenius minatus* | **BIRD** | |
| *Numenius minutus* | **BIRD** | **MI** |
| *Numenius phaeopus* | **BIRD** | **MI** |
| *Nycticorax caledonicus* | **BIRD** | |
| *Nycticorax caledonicus* subsp. *australasiae* | **BIRD** | |
| *Nycticorax caledonicus* subsp. *hilli* | **BIRD** | |
| *Nymphicus hollandicus* | **BIRD** | |
| *Oceanites oceanicus* | **BIRD** | **MI** |
| *Ocyphaps lophotes* | **BIRD** | |
| *Onychoprion anaethetus* | **BIRD** | **MI** |
| *Oreoica gutturalis* subsp. *gutturalis* | **BIRD** | |
| *Oriolus sagittatus* | **BIRD** | |
| *Pachycephala lanioides* | **BIRD** | |
| *Pachycephala melanura* | **BIRD** | |
| *Pachycephala melanura* subsp. *melanura* | **BIRD** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Pachycephala rufiventris* | **BIRD** | |
| *Pandion cristatus* | **BIRD** | **MI** |
| *Pandion haliaetus* subsp. *cristatus* | **BIRD** | |
| *Pardalotus rubricatus* | **BIRD** | |
| *Pardalotus striatus* | **BIRD** | |
| *Pardalotus striatus* subsp. *uropygialis* | **BIRD** | |
| *Passer montanus* | **BIRD** | |
| *Pavo cristatus* | **BIRD** | |
| *Pelecanoides urinatrix* subsp. *exsul* | **BIRD** | |
| *Pelecanus conspicillatus* | **BIRD** | |
| *Petrochelidon ariel* | **BIRD** | |
| *Petrochelidon nigricans* | **BIRD** | |
| *Petroica goodenovii* | **BIRD** | |
| *Phalacrocorax carbo* | **BIRD** | |
| *Phalacrocorax sulcirostris* | **BIRD** | |
| *Phalacrocorax varius* | **BIRD** | |
| *Phalaropus lobatus* | **BIRD** | **MI** |
| *Phaps chalcoptera* | **BIRD** | |
| *Phaps histrionica* | **BIRD** | |
| *Philemon argenticeps* | **BIRD** | |
| *Philemon citreogularis* | **BIRD** | |
| *Philemon citreogularis* subsp. *citreogularis* | **BIRD** | |
| *Philemon sp.* | **BIRD** | |
| *Philomachus pugnax* | **BIRD** | **MI** |
| *Pitta moluccensis* | **BIRD** | |
| *Platalea flavipes* | **BIRD** | |
| *Platalea regia* | **BIRD** | |
| *Plegadis falcinellus* | **BIRD** | **MI** |
| *Pluvialis fulva* | **BIRD** | **MI** |
| *Pluvialis squatarola* | **BIRD** | **MI** |
| *Podargus strigoides* | **BIRD** | |
| *Podargus strigoides* subsp. *phalaenoides* | **BIRD** | |
| *Podiceps cristatus* | **BIRD** | |
| *Poephila acuticauda* | **BIRD** | |
| *Poliocephalus poliocephalus* | **BIRD** | |
| *Polytelis alexandrae* | **BIRD** | **P4** |
| *Pomatostomus temporalis* | **BIRD** | |
| *Pomatostomus temporalis* subsp. *rubeculus* | **BIRD** | |
| *Porphyrio porphyrio* | **BIRD** | |
| *Porphyrio porphyrio* subsp. *melanotus* | **BIRD** | |
| *Porzana fluminea* | **BIRD** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Porzana pusilla* | **BIRD** | |
| *Porzana tabuensis* | **BIRD** | |
| *Psitteuteles versicolor* | **BIRD** | |
| *Ptilinopus regina* subsp. *ewingii* | **BIRD** | |
| *Ptilonorhynchus nuchalis* | **BIRD** | |
| *Ptilonorhynchus nuchalis* subsp. *nuchalis* | **BIRD** | |
| *Puffinus huttoni* | **BIRD** | **EN** |
| *Puffinus pacificus* | **BIRD** | |
| *Purnella albifrons* | **BIRD** | |
| *Rallina fasciata* | **BIRD** | |
| *Rallina fascinata* | **BIRD** | |
| *Recurvirostra novaehollandiae* | **BIRD** | |
| *Rhipidura albiscapa* | **BIRD** | |
| *Rhipidura leucophrys* | **BIRD** | |
| *Rhipidura phasiana* | **BIRD** | |
| *Rhipidura rufiventris* | **BIRD** | |
| *Rostratula australis* | **BIRD** | **EN** |
| *Rostratula benghalensis* subsp. *australis* | **BIRD** | |
| *Scythrops novaehollandiae* | **BIRD** | |
| *Smicrornis brevirostris* | **BIRD** | |
| *Sphecotheres viridis* | **BIRD** | |
| *Stercorarius parasiticus* | **BIRD** | **MI** |
| *Sterna albifrons* subsp. *sinensis* | **BIRD** | |
| *Sterna anaethetus* subsp. *anaethetus* | **BIRD** | |
| *Sterna bengalensis* | **BIRD** | |
| *Sterna bergii* | **BIRD** | |
| *Sterna caspia* | **BIRD** | |
| *Sterna dougallii* | **BIRD** | **MI** |
| *Sterna dougallii* subsp. *gracilis* | **BIRD** | |
| *Sterna fuscata* subsp. *nubilosa* | **BIRD** | |
| *Sterna hirundo* | **BIRD** | **MI** |
| *Sterna hirundo* subsp. *longipennis* | **BIRD** | |
| *Sterna hybrida* | **BIRD** | |
| *Sterna hybrida* subsp. *javanica* | **BIRD** | |
| *Sterna leucoptera* | **BIRD** | |
| *Sterna nilotica* | **BIRD** | |
| *Sternula albifrons* | **BIRD** | **MI** |
| *Sternula nereis* | **BIRD** | |
| *Stictonetta naevosa* | **BIRD** | |
| *Stiltia isabella* | **BIRD** | |
| *Stomiopera unicolor* subsp. *unicolor* | **BIRD** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Sturnus vulgaris* | **BIRD** | |
| *Sugomel niger* | **BIRD** | |
| *Sula leucogaster* | **BIRD** | **MI** |
| *Sula leucogaster* subsp. *plotus* | **BIRD** | |
| *Tachybaptus novaehollandiae* | **BIRD** | |
| *Tachybaptus novaehollandiae* subsp. *novaehollandiae* | **BIRD** | |
| *Tachybaptus ruficollis* | **BIRD** | |
| *Tadorna radjah* | **BIRD** | |
| *Taeniopygia bichenovii* | **BIRD** | |
| *Taeniopygia bichenovii* subsp. *annulosa* | **BIRD** | |
| *Taeniopygia guttata* | **BIRD** | |
| *Taeniopygia guttata* subsp. *castanotis* | **BIRD** | |
| *Thalasseus bengalensis* | **BIRD** | |
| *Thalasseus bergii* | **BIRD** | **MI** |
| *Threskiornis molucca* | **BIRD** | |
| *Threskiornis spinicollis* | **BIRD** | |
| *Todiramphus chloris* | **BIRD** | |
| *Todiramphus chloris* subsp. *sordida* | **BIRD** | |
| *Todiramphus pyrrhopygius* | **BIRD** | |
| *Todiramphus sanctus* | **BIRD** | |
| *Todiramphus sanctus* subsp. *sanctus* | **BIRD** | |
| *Tribonyx ventralis* | **BIRD** | |
| *Trichoglossus haematodus* | **BIRD** | |
| *Trichoglossus haematodus* subsp. *rubritorquis* | **BIRD** | |
| *Tringa brevipes* | **BIRD** | **MI & P4** |
| *Tringa cinerea* | **BIRD** | |
| *Tringa glareola* | **BIRD** | |
| *Tringa hypoleucos* | **BIRD** | |
| *Tringa nebularia* | **BIRD** | **MI** |
| *Tringa stagnatilis* | **BIRD** | **MI** |
| *Tringa totanus* | **BIRD** | **MI** |
| *Turnix castanota* | **BIRD** | |
| *Turnix maculosa* subsp. *melanota* | **BIRD** | |
| *Turnix maculosus* | **BIRD** | |
| *Turnix pyrrhothorax* | **BIRD** | |
| *Turnix sp.* | **BIRD** | |
| *Turnix velox* | **BIRD** | |
| *Tyto alba* subsp. *delicatula* | **BIRD** | |
| *Tyto capensis* subsp. *longimembris* | **BIRD** | |
| *Tyto longimembris* | **BIRD** | |
| *Tyto novaehollandiae* subsp. *novaehollandiae* | **BIRD** | **P3** |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Vanellus miles* | **BIRD** | |
| *Vanellus miles* subsp. *miles* | **BIRD** | |
| *Vanellus tricolor* | **BIRD** | |
| *Xema sabini* | **BIRD** | |
| *Xenus cinereus* | **BIRD** | **P3** |
| *Zosterops lateralis* | **BIRD** | |
| *Zosterops luteus* | **BIRD** | |
| *Abudefduf bengalensis* | **FISH** | |
| *Abudefduf sp.* | **FISH** | |
| *Acanthopagrus latus* | **FISH** | |
| *Acanthopagrus palmaris* | **FISH** | |
| *Acanthurus dussumieri* | **FISH** | |
| *Acanthurus grammoptilus* | **FISH** | |
| *Acentrogobius nebulosus* | **FISH** | |
| *Acentrogobius viridipunctatus* | **FISH** | |
| *Alectis indica* | **FISH** | |
| *Alionematichthys piger* | **FISH** | |
| *Ambassis vachellii* | **FISH** | |
| *Amniataba caudavittata* | **FISH** | |
| *Amphiprion rubrocinctus* | **FISH** | |
| *Anguilla bicolor* | **FISH** | |
| *Apogon cookii* | **FISH** | |
| *Apogon doederleini* | **FISH** | |
| *Apogon pallidofasciatus* | **FISH** | |
| *Apogon rueppellii* | **FISH** | |
| *Apogon sp.* | **FISH** | |
| *Archamia biguttata* | **FISH** | |
| *Arius sp.* | **FISH** | |
| *Arothron hispidus* | **FISH** | |
| *Arothron manilensis* | **FISH** | |
| *Arrhamphus sclerolepis* | **FISH** | |
| *Atherinomorus endrachtensis* | **FISH** | |
| *Bathygobius fuscus* | **FISH** | |
| *Bathygobius parvus* | **FISH** | |
| *Batrachomoeus dahli* | **FISH** | |
| *Batrachomoeus occidentalis* | **FISH** | |
| *Blennodesmus scapularis* | **FISH** | |
| *Boleophthalmus caeruleomaculatus* | **FISH** | |
| *Brachysomophis cirrocheilos* | **FISH** | |
| *Caranx bucculentus* | **FISH** | |
| *Caranx ignobilis* | **FISH** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Caranx sexfasciatus* | **FISH** | |
| *Caranx sp.* | **FISH** | |
| *Centriscus scutatus* | **FISH** | |
| *Centrogenys vaigiensis* | **FISH** | |
| *Cephalopholis boenak* | **FISH** | |
| *Chaetodon aureofasciatus* | **FISH** | |
| *Chaetodontoplus duboulayi* | **FISH** | |
| *Chanos chanos* | **FISH** | |
| *Chelmon marginalis* | **FISH** | |
| *Chelmon muelleri* | **FISH** | |
| *Chelonodon patoca* | **FISH** | |
| *Chiloscyllium punctatum* | **FISH** | |
| *Chirocentrus dorab* | **FISH** | |
| *Choerodon cyanodus* | **FISH** | |
| *Choerodon schoenleinii* | **FISH** | |
| *Choerodon sp.* | **FISH** | |
| *Chromileptes altivelis* | **FISH** | |
| *Conger cinereus* | **FISH** | |
| *Congrogadus subducens* | **FISH** | |
| *Craterocephalus pauciradiatus* | **FISH** | |
| *Craterocephalus sp.* | **FISH** | |
| *Cymbacephalus nematophthalmus* | **FISH** | |
| *Cymbacephalus sp.* | **FISH** | |
| *Cynoglossus sp.* | **FISH** | |
| *Cypselurus sp.* | **FISH** | |
| *Dampierosa daruma* | **FISH** | |
| *Drepane punctata* | **FISH** | |
| *Drombus sp.* | **FISH** | |
| *Drombus triangularis* | **FISH** | |
| *Echeneis naucrates* | **FISH** | |
| *Elates ransonnetii* | **FISH** | |
| *Eleutheronema tetradactylum* | **FISH** | |
| *Elops hawaiensis* | **FISH** | |
| *Enneapterygius gracilis* | **FISH** | |
| *Enneapterygius larsonae* | **FISH** | |
| *Epinephelus areolatus* | **FISH** | |
| *Epinephelus bleekeri* | **FISH** | |
| *Epinephelus coioides* | **FISH** | |
| *Epinephelus corallicola* | **FISH** | |
| *Epinephelus fasciatus* | **FISH** | |
| *Epinephelus malabaricus* | **FISH** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Epinephelus ongus* | **FISH** | |
| *Epinephelus quoyanus* | **FISH** | |
| *Epinephelus sp.* | **FISH** | |
| *Eusurculus pistillum* | **FISH** | |
| *Eviota bimaculata* | **FISH** | |
| *Eviota queenslandica* | **FISH** | |
| *Eviota sp.* | **FISH** | |
| *Fistularia petimba* | **FISH** | |
| *Fowleria aurita* | **FISH** | |
| *Gerres sp.* | **FISH** | |
| *Gerres subfasciatus* | **FISH** | |
| *Gymnothorax favagineus* | **FISH** | |
| *Gymnothorax pseudothyrsoideus* | **FISH** | |
| *Gymnothorax undulatus* | **FISH** | |
| *Halichoeres melanochir* | **FISH** | |
| *Halichoeres nigrescens* | **FISH** | |
| *Halophryne diemensis* | **FISH** | |
| *Halophryne ocellatus* | **FISH** | |
| *Hapalogenys kishinouyei* | **FISH** | |
| *Hemiramphus robustus* | **FISH** | |
| *Hemiscyllium trispeculare* | **FISH** | |
| *Herklotsichthys blackburni* | **FISH** | |
| *Himantura uarnak* | **FISH** | |
| *Hippichthys penicillus* | **FISH** | |
| *Hippocampus angustus* | **FISH** | |
| *Hippocampus sp.* | **FISH** | |
| *Hypoatherina temminckii* | **FISH** | |
| *Ichthyscopus insperatus* | **FISH** | |
| *Ichthyscopus spinosus* | **FISH** | |
| *Istigobius decoratus* | **FISH** | |
| *Istigobius diadema* | **FISH** | |
| *Istigobius nigroocellatus* | **FISH** | |
| *Istigobius ornatus* | **FISH** | |
| *Istigobius sp.* | **FISH** | |
| *Johnius amblycephalus* | **FISH** | |
| *Labracinus lineatus* | **FISH** | |
| *Lactoria cornuta* | **FISH** | |
| *Laiphognathus multimaculatus* | **FISH** | |
| *Leiognathus equulus* | **FISH** | |
| *Leptobrama muelleri* | **FISH** | |
| *Lethrinus laticaudis* | **FISH** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Lethrinus sp.* | **FISH** | |
| *Liza alata* | **FISH** | |
| *Liza subviridis* | **FISH** | |
| *Liza vaigiensis* | **FISH** | |
| *Lophiocharon hutchinsi* | **FISH** | |
| *Lophiocharon trisignatus* | **FISH** | |
| *Lutjanus carponotatus* | **FISH** | |
| *Lutjanus erythropterus* | **FISH** | |
| *Lutjanus lemniscatus* | **FISH** | |
| *Lutjanus malabaricus* | **FISH** | |
| *Lutjanus quinquelineatus* | **FISH** | |
| *Lutjanus russellii* | **FISH** | |
| *Lutjanus sp.* | **FISH** | |
| *Lutjanus vitta* | **FISH** | |
| *Marilyna meraukensis* | **FISH** | |
| *Megalops cyprinoides* | **FISH** | |
| *Melanotaenia sp.* | **FISH** | |
| *Micrognathus micronotopterus* | **FISH** | |
| *Mugil cephalus* | **FISH** | |
| *Mugil sp.* | **FISH** | |
| *Naso sp.* | **FISH** | |
| *Nematalosa come* | **FISH** | |
| *Nematalosa sp.* | **FISH** | |
| *Nematalosa vlaminghi* | **FISH** | |
| *Neosilurus hyrtlii* | **FISH** | |
| *Netuma proxima* | **FISH** | |
| *Nibea microgenys* | **FISH** | |
| *Norfolkia sp.* | **FISH** | |
| *Notograptus guttatus* | **FISH** | |
| *Omobranchus ferox* | **FISH** | |
| *Omobranchus lineolatus* | **FISH** | |
| *Omobranchus rotundiceps* | **FISH** | |
| *Omobranchus verticalis* | **FISH** | |
| *Onuxodon margaritiferae* | **FISH** | |
| *Ophichthus rutidoderma* | **FISH** | |
| *Ophieleotris aporos* | **FISH** | |
| *Opistognathus darwiniensis* | **FISH** | |
| *Opistognathus inornatus* | **FISH** | |
| *Opistognathus reticulatus* | **FISH** | |
| *Orectolobus wardi* | **FISH** | |
| *Ostracion rhinorhynchos* | **FISH** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Oxyeleotris sp.* | **FISH** | |
| *Pantolabus radiatus* | **FISH** | |
| *Parablennius tasmanianus* | **FISH** | |
| *Paradiplogrammus enneactis* | **FISH** | |
| *Paraplagusia sinerama* | **FISH** | |
| *Paraploactis pulvinus* | **FISH** | |
| *Paraplotosus albilabris* | **FISH** | |
| *Paraplotosus butleri* | **FISH** | |
| *Paraplotosus muelleri* | **FISH** | |
| *Parascolopsis sp.* | **FISH** | |
| *Parascorpaena picta* | **FISH** | |
| *Pardachirus pavoninus* | **FISH** | |
| *Parupeneus indicus* | **FISH** | |
| *Pempheris ypsilychnus* | **FISH** | |
| *Pentapodus emeryii* | **FISH** | |
| *Pentapodus porosus* | **FISH** | |
| *Periophthalmus argentilineatus* | **FISH** | |
| *Periophthalmus koelreuteri* | **FISH** | |
| *Pisodonophis cancrivorus* | **FISH** | |
| *Platybelone argalus* | **FISH** | |
| *Platycephalus sp.* | **FISH** | |
| *Plectorhinchus unicolor* | **FISH** | |
| *Plotosus lineatus* | **FISH** | |
| *Polydactylus macrochir* | **FISH** | |
| *Polydactylus multiradiatus* | **FISH** | |
| *Polydactylus sheridani* | **FISH** | |
| *Pomacanthus sexstriatus* | **FISH** | |
| *Pomacentrus milleri* | **FISH** | |
| *Pomadasys argenteus* | **FISH** | |
| *Priolepis nuchifasciata* | **FISH** | |
| *Prionobutis microps* | **FISH** | |
| *Pristis pristis* | **FISH** | **P3** |
| *Pristis sp.* | **FISH** | |
| *Pristis zijsron* | **FISH** | **VU** |
| *Psammoperca waigiensis* | **FISH** | |
| *Pseudochromis fuscus* | **FISH** | |
| *Pseudochromis sp.* | **FISH** | |
| *Pseudochromis wilsoni* | **FISH** | |
| *Pseudogobius sp.* | **FISH** | |
| *Pseudomugil cyanodorsalis* | **FISH** | |
| *Pseudorhombus sp.* | **FISH** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Pterois antennata* | **FISH** | |
| *Pterois sp.* | **FISH** | |
| *Remora remora* | **FISH** | |
| *Rhina ancylostoma* | **FISH** | |
| *Rhinobatos sp.* | **FISH** | |
| *Rhizoprionodon acutus* | **FISH** | |
| *Salarias sexfilum* | **FISH** | |
| *Salarias sexfilum?* | **FISH** | |
| *Sargocentron rubrum* | **FISH** | |
| *Scaevius milii* | **FISH** | |
| *Scartelaos histophorus* | **FISH** | |
| *Scarus ghobban* | **FISH** | |
| *Scolecenchelys macroptera* | **FISH** | |
| *Scolopsis monogramma* | **FISH** | |
| *Scolopsis monogramma* | **FISH** | |
| *Scolopsis sp.* | **FISH** | |
| *Scomberoides commersonnianus* | **FISH** | |
| *Scomberoides lysan* | **FISH** | |
| *Scomberoides sp.* | **FISH** | |
| *Scomberomorus semifasciatus* | **FISH** | |
| *Scomberomorus sp.* | **FISH** | |
| *Scorpaenopsis neglecta* | **FISH** | |
| *Selaroides leptolepis* | **FISH** | |
| *Selenotoca multifasciata* | **FISH** | |
| *Siganus sp.* | **FISH** | |
| *Sillago analis* | **FISH** | |
| *Sillago burrus* | **FISH** | |
| *Sillago sihama* | **FISH** | |
| *Sphyraena putnamae* | **FISH** | |
| *Spratelloides delicatulus* | **FISH** | |
| *Strongylura sp.* | **FISH** | |
| *Strongylura strongylura* | **FISH** | |
| *Synanceia horrida* | **FISH** | |
| *Synodus jaculum* | **FISH** | |
| *Taeniura lymma* | **FISH** | |
| *Terapon jarbua* | **FISH** | |
| *Terapon puta* | **FISH** | |
| *Terapon sp.* | **FISH** | |
| *Terapon theraps* | **FISH** | |
| *Thryssa aestuaria* | **FISH** | |
| *Toxotes chatareus* | **FISH** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Trachinocephalus myops* | **FISH** | |
| *Tragulichthys jaculiferus* | **FISH** | |
| *Trichiurus lepturus* | **FISH** | |
| *Trichonotus setiger* | **FISH** | |
| *Upeneus sp.* | **FISH** | |
| *Urogymnus asperrimus* | **FISH** | |
| *Valamugil cunnesius* | **FISH** | |
| *Valamugil sp.* | **FISH** | |
| *Valenciennea alleni* | **FISH** | |
| *Bos taurus* | **MAMMAL** | |
| *Camelus dromedarius* | **MAMMAL** | |
| *Canis lupus* | **MAMMAL** | |
| *Canis lupus* subsp. *dingo* | **MAMMAL** | |
| *Chaerephon jobensis* | **MAMMAL** | |
| *Chalinolobus gouldii* | **MAMMAL** | |
| *Chalinolobus nigrogriseus* | **MAMMAL** | |
| *Dasyurus hallucatus* | **MAMMAL** | **EN** |
| *Dugong dugon* | **MAMMAL** | **OS** |
| *Equus caballus* | **MAMMAL** | |
| *Felis catus* | **MAMMAL** | |
| *Hydromys chrysogaster* | **MAMMAL** | **P4** |
| *Macropus agilis* | **MAMMAL** | |
| *Macrotis lagotis* | **MAMMAL** | **VU** |
| *Megaptera novaeangliae* | **MAMMAL** | **CD** |
| *Mesembriomys macrurus* | **MAMMAL** | **P4** |
| *Miniopterus schreibersii subsp. orianae* | **MAMMAL** | |
| *Mormopterus beccarii* | **MAMMAL** | |
| *Mormopterus loriae* | **MAMMAL** | |
| *Mus musculus* | **MAMMAL** | |
| *Notamacropus agilis* | **MAMMAL** | |
| *Nyctophilus arnhemensis* | **MAMMAL** | |
| *Nyctophilus geoffroyi* | **MAMMAL** | |
| *Onychogalea unguifera* | **MAMMAL** | |
| *Orcaella brevirostris* | **MAMMAL** | |
| *Orcaella heinsohni* | **MAMMAL** | **P4** |
| *Osphranter rufus* | **MAMMAL** | |
| *Ozimops cobourgianus* | **MAMMAL** | |
| *Pipistrellus westralis* | **MAMMAL** | |
| *Planigale ingrami* | **MAMMAL** | |
| *Planigale maculata* | **MAMMAL** | |
| *Planigale sp.* | **MAMMAL** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Pseudomys delicatulus* | **MAMMAL** | |
| *Pseudomys nanus* | **MAMMAL** | |
| *Pseudorca crassidens* | **MAMMAL** | |
| *Pteropus alecto* | **MAMMAL** | |
| *Pteropus scapulatus* | **MAMMAL** | |
| *Rattus rattus* | **MAMMAL** | |
| *Saccolaimus flaviventris* | **MAMMAL** | |
| *Scotorepens greyii* | **MAMMAL** | |
| *Scotorepens sanborni* | **MAMMAL** | |
| *Sousa chinensis* | **MAMMAL** | |
| *Tachyglossus aculeatus* | **MAMMAL** | |
| *Trichosurus vulpecula* subsp. *arnhemensis* | **MAMMAL** | **VU** |
| *Trichosurus vulpecula* subsp. *arnhemensis (Kimberley)* | **MAMMAL** | |
| *Tursiops aduncus* | **MAMMAL** | |
| *Tursiops truncatus* | **MAMMAL** | |
| *Wyulda squamicaudata* | **MAMMAL** | **VU** |
| *Aipysurus apraefrontalis* | **REPTILE** | **CR** |
| *Aipysurus laevis* | **REPTILE** | |
| *Aipysurus mosaicus* | **REPTILE** | |
| *Aipysurus tenuis* | **REPTILE** | |
| *Amalosia rhombifer* | **REPTILE** | |
| *Amphibolurus gilberti* | **REPTILE** | |
| *Anilios diversus* | **REPTILE** | |
| *Anilios grypus* | **REPTILE** | |
| *Antaresia childreni* | **REPTILE** | |
| *Antaresia stimsoni* | **REPTILE** | |
| *Antaresia stimsoni* subsp. *stimsoni* | **REPTILE** | |
| *Aspidites melanocephalus* | **REPTILE** | |
| *Brachyurophis roperi* | **REPTILE** | |
| *Carlia amax* | **REPTILE** | |
| *Carlia munda* | **REPTILE** | |
| *Carlia rufilatus* | **REPTILE** | |
| *Carlia triacantha* | **REPTILE** | |
| *Chelodina burrungandjii* | **REPTILE** | |
| *Chelonia mydas* | **REPTILE** | **VU** |
| *Chlamydosaurus kingii* | **REPTILE** | |
| *Crenadactylus ocellatus* subsp. *rostralis* | **REPTILE** | |
| *Cryptoblepharus metallicus* | **REPTILE** | |
| *Cryptoblepharus ruber* | **REPTILE** | |
| *Cryptoblepharus tytthos* | **REPTILE** | |
| *Ctenophorus caudicinctus* subsp. *caudicinctus* | **REPTILE** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Ctenophorus isolepis* subsp. *isolepis* | **REPTILE** | |
| *Ctenophorus nuchalis* | **REPTILE** | |
| *Ctenotus angusticeps* | **REPTILE** | **P3** |
| *Ctenotus inornatus* | **REPTILE** | |
| *Ctenotus pantherinus* | **REPTILE** | |
| *Ctenotus pantherinus* subsp. *calx* | **REPTILE** | |
| *Ctenotus robustus* | **REPTILE** | |
| *Ctenotus saxatilis* | **REPTILE** | |
| *Ctenotus serventi* | **REPTILE** | |
| *Ctenotus serventyi* | **REPTILE** | |
| *Delma desmosa* | **REPTILE** | |
| *Delma sp.* | **REPTILE** | |
| *Delma tincta* | **REPTILE** | |
| *Demansia angusticeps* | **REPTILE** | |
| *Diplodactylus conspicillatus* | **REPTILE** | |
| *Diporiphora pindan* | **REPTILE** | |
| *Diporiphora winneckei* | **REPTILE** | |
| *Disteira major* | **REPTILE** | |
| *Disteira stokesii* | **REPTILE** | |
| *Ephalophis greyae* | **REPTILE** | |
| *Eremiascincus isolepis* | **REPTILE** | |
| *Eretmochelys imbricata* subsp. *bissa* | **REPTILE** | |
| *Fordonia leucobalia* | **REPTILE** | |
| *Furina ornata* | **REPTILE** | |
| *Gehyra australis* | **REPTILE** | |
| *Gehyra kimberleyi* | **REPTILE** | |
| *Gehyra pilbara* | **REPTILE** | |
| *Gehyra variegata* | **REPTILE** | |
| *Glaphyromorphus isolepis* | **REPTILE** | |
| *Hemidactylus frenatus* | **REPTILE** | |
| *Hemidactylus frennatus* | **REPTILE** | |
| *Heteronotia binoei* | **REPTILE** | |
| *Hydrelaps darwiniensis* | **REPTILE** | |
| *Hydrophis major* | **REPTILE** | |
| *Hydrophis peronii* | **REPTILE** | |
| *Hydrophis stokesii* | **REPTILE** | |
| *Lepidochelys olivacea* | **REPTILE** | **EN** |
| *Lerista apoda* | **REPTILE** | |
| *Lerista bipes* | **REPTILE** | |
| *Lerista griffini* | **REPTILE** | |
| *Lerista labialis* | **REPTILE** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Lerista separanda* | **REPTILE** | **P2** |
| *Lialis burtonis* | **REPTILE** | |
| *Liasis mackloti* subsp. *fuscus* | **REPTILE** | |
| *Lucasium stenodactylum* | **REPTILE** | |
| *Menetia greyii* | **REPTILE** | |
| *Menetia maini* | **REPTILE** | |
| *Morethia ruficauda* subsp. *ruficauda* | **REPTILE** | |
| *Morethia storri* | **REPTILE** | |
| *Natator depressus* | **REPTILE** | **VU** |
| *Oedura rhombifera* | **REPTILE** | |
| *Pogona minor* | **REPTILE** | |
| *Pogona minor* subsp. *mitchelli* | **REPTILE** | |
| *Proablepharus tenuis* | **REPTILE** | |
| *Pseudechis australis* | **REPTILE** | |
| *Pseudonaja mengdeni* | **REPTILE** | |
| *Pygopus nigriceps* | **REPTILE** | |
| *Ramphotyphlops braminus* | **REPTILE** | |
| *Ramphotyphlops diversus* | **REPTILE** | |
| *Ramphotyphlops grypus* | **REPTILE** | |
| *Rhynchoedura ornata* | **REPTILE** | |
| *Simoselaps minimus* | **REPTILE** | **P2** |
| *Strophurus ciliaris* | **REPTILE** | |
| *Strophurus ciliaris* subsp. *aberrans* | **REPTILE** | |
| *Strophurus ciliaris* subsp. *ciliaris* | **REPTILE** | |
| *Suta punctata* | **REPTILE** | |
| *Tiliqua multifasciata* | **REPTILE** | |
| *Tiliqua scincoides* | **REPTILE** | |
| *Tiliqua scincoides* subsp. *intermedia* | **REPTILE** | **CR** |
| *Varanus acanthurus* | **REPTILE** | |
| *Varanus accanthurus* | **REPTILE** | |
| *Varanus gouldii* | **REPTILE** | |
| *Varanus panoptes* subsp. *panoptes* | **REPTILE** | |
| *Varanus panoptes* | **REPTILE** | |
| *Varanus tristis* | **REPTILE** | |
| *Varanus tristis* subsp. *tristis* | **REPTILE** | |
| *Bufo marinus* | **AMPHIBIAN** | |
| *Cyclorana australis* | **AMPHIBIAN** | |
| *Cyclorana longipes* | **AMPHIBIAN** | |
| *Litoria caerulea* | **AMPHIBIAN** | |
| *Litoria caurelea* | **AMPHIBIAN** | |
| *Litoria nasuta* | **AMPHIBIAN** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Litoria rothii* | **AMPHIBIAN** | |
| *Litoria rubella* | **AMPHIBIAN** | |
| *Notaden nichollsi* | **AMPHIBIAN** | |
| *Platyplectrum ornatum* | **AMPHIBIAN** | |
| *Uperoleia aspera* | **AMPHIBIAN** | |
| *Uperoleia talpa* | **AMPHIBIAN** | |



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*Terrestrial Flora Nature Map Desktop Result for Broome*

| TAXON | CLASS | CONS |
|---|---|---|
| *Abrus precatorius* subsp. *precatorius* | **DICOT** | |
| *Abutilon hannii* | **DICOT** | |
| *Abutilon indicum* var. *australiense* | **DICOT** | |
| *Abutilon otocarpum* | **DICOT** | |
| *Acacia adoxa* var. *subglabra* | **DICOT** | |
| *Acacia adoxa* x *hippuroides* | **DICOT** | |
| *Acacia ampliceps* | **DICOT** | |
| *Acacia ampliceps* x *bivenosa* | **DICOT** | |
| *Acacia bivenosa* | **DICOT** | |
| *Acacia colei* | **DICOT** | |
| *Acacia colei* var. *colei* | **DICOT** | |
| *Acacia eriopoda* | **DICOT** | |
| *Acacia eriopoda x tumida* var. *tumida* | **DICOT** | |
| *Acacia hippuroides* | **DICOT** | |
| *Acacia monticola* | **DICOT** | |
| *Acacia monticola* x *tumida* var. *kulparn* | **DICOT** | **P3** |
| *Acacia platycarpa* | **DICOT** | |
| *Acacia plectocarpa* subsp. *plectocarpa* | **DICOT** | |
| *Acacia sp.* | **DICOT** | |
| *Acacia sp. Broome (B.R. Maslin 4918)* | **DICOT** | |
| *Acacia trachycarpa* | **DICOT** | |
| *Acacia translucens* | **DICOT** | |
| *Acacia tumida* var. *kulparn* | **DICOT** | |
| *Acacia tumida* var. *tumida* | **DICOT** | |
| *Acanthospermum hispidum* | **DICOT** | |
| *Achyranthes aspera* | **DICOT** | |
| *Adansonia gregorii* | **DICOT** | |
| *Adriana tomentosa* var. *tomentosa* | **DICOT** | |
| *Aegiceras corniculatum* | **DICOT** | |
| *Aerva javanica* | **DICOT** | |
| *Aeschynomene indica* | **DICOT** | |
| *Ageratum conyzoides* | **DICOT** | |
| *Albizia lebbeck* | **DICOT** | |
| *Alstonia linearis* | **DICOT** | |
| *Alternanthera brasiliana* | **DICOT** | |
| *Alternanthera pungens* | **DICOT** | |
| *Alyogyne pinoniana* | **DICOT** | |
| *Alysicarpus ovalifolius* | **DICOT** | |
| *Amaranthus dubius* | **DICOT** | |
| *Amaranthus sp.* | **DICOT** | |



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|---|---|---|
| *Amaranthus undulatus* | **DICOT** | |
| *Ammannia baccifera* | **DICOT** | |
| *Amyema benthamii* | **DICOT** | |
| *Amyema bifurcata* | **DICOT** | |
| *Amyema sanguinea* var. *sanguinea* | **DICOT** | |
| *Amyema thalassia* | **DICOT** | |
| *Androcalva loxophylla* | **DICOT** | |
| *Anodendron oblongifolium* | **DICOT** | |
| *Anondendron oblongifolium* | **DICOT** | |
| *Antigonon leptopus* | **DICOT** | |
| *Aphyllodium glossocarpum* | **DICOT** | **P3** |
| *Asystasia gangetica* subsp. *gangetica* | **DICOT** | |
| *Atalaya hemiglauca* | **DICOT** | |
| *Avicennia marina* | **DICOT** | |
| *Azadirachta indica* | **DICOT** | |
| *Batis argillicola* | **DICOT** | |
| *Bauhinia cunninghamii* | **DICOT** | |
| *Bergia ammannioides* | **DICOT** | |
| *Blighia sapida* | **DICOT** | |
| *Blumea integrifolia* | **DICOT** | |
| *Blumea saxatilis* | **DICOT** | |
| *Blumea tenella* | **DICOT** | |
| *Boerhavia coccinea* | **DICOT** | |
| *Boerhavia dominii* | **DICOT** | |
| *Boerhavia gardneri* | **DICOT** | |
| *Boerhavia paludosa* | **DICOT** | |
| *Boerhavia sp.* | **DICOT** | |
| *Bonamia media* | **DICOT** | |
| *Brachychiton diversifolius* subsp. *diversifolius* | **DICOT** | |
| *Bridelia tomentosa* | **DICOT** | |
| *Bruguiera exaristata* | **DICOT** | |
| *Buchnera asperata* | **DICOT** | |
| *Buchnera linearis* | **DICOT** | |
| *Buchnera ramosissima* | **DICOT** | |
| *Butea monosperma* | **DICOT** | |
| *Byblis filifolia* | **DICOT** | |
| *Byblis liniflora* | **DICOT** | |
| *Byblis rorida* | **DICOT** | |
| *Caesalpinia major* | **DICOT** | |
| *Caesalpinia sp.* | **DICOT** | |
| *Cajanus marmoratus* | **DICOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Calandrinia quadrivalvis* | **DICOT** | |
| *Calandrinia strophiolata* | **DICOT** | |
| *Calandrinia tepperiana* | **DICOT** | |
| *Calliandra sp.* | **DICOT** | |
| *Calotropis gigantea* | **DICOT** | |
| *Calytrix exstipulata* | **DICOT** | |
| *Camptostemon schultzii* | **DICOT** | |
| *Canavalia rosea* | **DICOT** | |
| *Capparis lasiantha* | **DICOT** | |
| *Capsicum annuum* | **DICOT** | |
| *Cardamine sp.* | **DICOT** | |
| *Carissa lanceolata* | **DICOT** | |
| *Cascabela thevetia* | **DICOT** | |
| *Cassia roxburghii* | **DICOT** | |
| *Cassytha capillaris* | **DICOT** | |
| *Cassytha filiformis* | **DICOT** | |
| *Centratherum punctatum* | **DICOT** | |
| *Centrosema molle* | **DICOT** | |
| *Centrosema pascuorum* | **DICOT** | |
| *Ceratophyllum demersum* | **DICOT** | |
| *Ceriops australis* | **DICOT** | |
| *Chamaecrista absus* var. *absus* | **DICOT** | |
| *Cissus rotundifolia* | **DICOT** | |
| *Citrullus amarus* | **DICOT** | |
| *Cleome tetrandra* var. *tetrandra* | **DICOT** | |
| *Cleome viscosa* | **DICOT** | |
| *Clerodendrum floribundum* | **DICOT** | |
| *Clerodendrum floribundum* var. *coriaceum* | **DICOT** | **P3** |
| *Clerodendrum floribundum* var. *ovatum* | **DICOT** | |
| *Clerodendrum tomentosum* var. *mollissima* | **DICOT** | |
| *Clerodendrum tomentosum* var. *tomentosum* | **DICOT** | |
| *Clitoria ternatea* | **DICOT** | |
| *Coccinia grandis* | **DICOT** | |
| *Codonocarpus cotinifolius* | **DICOT** | |
| *Conyza bonariensis* | **DICOT** | |
| *Corchorus aestuans* | **DICOT** | |
| *Corchorus incanus* subsp. *incanus* | **DICOT** | |
| *Corchorus olitorius* | **DICOT** | |
| *Corchorus sidoides* subsp. *sidoides* | **DICOT** | |
| *Corchorus sidoides* subsp. *vermicularis* | **DICOT** | |
| *Cordia sebestena* | **DICOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Corymbia bella* | **DICOT** | |
| *Corymbia dendromerinx* | **DICOT** | |
| *Corymbia flavescens* | **DICOT** | |
| *Corymbia greeniana* | **DICOT** | |
| *Corymbia greeniana* x *polycarpa* | **DICOT** | |
| *Corymbia greeniana* x *zygophylla* | **DICOT** | |
| *Corymbia opaca* | **DICOT** | |
| *Corymbia paractia* | **DICOT** | **P1** |
| *Corymbia polycarpa* | **DICOT** | |
| *Corymbia zygophylla* | **DICOT** | |
| *Crotalaria brevis* | **DICOT** | |
| *Crotalaria cunninghamii* | **DICOT** | |
| *Crotalaria cunninghamii* subsp. *cunninghamii* | **DICOT** | |
| *Crotalaria medicaginea* var. *neglecta* | **DICOT** | |
| *Crotalaria ramosissima* | **DICOT** | |
| *Crotalaria sp.* | **DICOT** | |
| *Cryptostegia madagascariensis* | **DICOT** | |
| *Cucumis maderaspatanus* | **DICOT** | |
| *Cucumis melo* | **DICOT** | |
| *Cucumis picrocarpus* | **DICOT** | |
| *Cullen corallum* | **DICOT** | |
| *Cullen martinii* | **DICOT** | |
| *Cullen pustulatum* | **DICOT** | |
| *Cuscuta campestris* | **DICOT** | |
| *Cuscuta chinensis* | **DICOT** | |
| *Cuscuta victoriana* | **DICOT** | |
| *Cyanostegia cyanocalyx* | **DICOT** | |
| *Cyanthillium cinereum* var. *cinereum* | **DICOT** | |
| *Cyanthillium cinereum* var. *lanatum* | **DICOT** | |
| *Cynanchum pedunculatum* | **DICOT** | |
| *Cynanchum viminale* subsp. *australe* | **DICOT** | |
| *Dendrophthoe acacioides* subsp. *acacioides* | **DICOT** | |
| *Denhamia cunninghamii* | **DICOT** | |
| *Dentella misera* | **DICOT** | |
| *Desmodium filiforme* | **DICOT** | |
| *Desmodium tortuosum* | **DICOT** | |
| *Dichrostachys spicata* | **DICOT** | |
| *Distimake aegyptius* | **DICOT** | |
| *Distimake dissectus* var. *dissectus* | **DICOT** | |
| *Dodonaea hispidula* var. *arida* | **DICOT** | |
| *Dodonaea hispidula* var. *phylloptera* | **DICOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Dolichandra unguis-cati* | **DICOT** | |
| *Dolichandrone occidentalis* | **DICOT** | |
| *Drosera broomensis* | **DICOT** | |
| *Dysphania plantaginella* | **DICOT** | |
| *Eclipta platyglossa* subsp. *borealis* | **DICOT** | **P3** |
| *Eclipta prostrata* | **DICOT** | |
| *Ehretia saligna* | **DICOT** | |
| *Ehretia saligna* var. *saligna* | **DICOT** | |
| *Eleutheranthera ruderalis* | **DICOT** | |
| *Eruca sativa* | **DICOT** | |
| *Erythrina vespertilio* | **DICOT** | |
| *Erythrophleum chlorostachys* | **DICOT** | |
| *Eucalyptus microtheca* | **DICOT** | |
| *Eucalyptus tectifica* | **DICOT** | |
| *Eupatorium sp.* | **DICOT** | |
| *Euphorbia australis* var. *subtomentosa* | **DICOT** | |
| *Euphorbia coghlanii* | **DICOT** | |
| *Euphorbia cyathophora* | **DICOT** | |
| *Euphorbia hassallii* | **DICOT** | |
| *Euphorbia heterophylla* | **DICOT** | |
| *Euphorbia hirta* | **DICOT** | |
| *Euphorbia myrtoides* | **DICOT** | |
| *Euphorbia schultzii* | **DICOT** | |
| *Euphorbia sp.* | **DICOT** | |
| *Euphorbia thymifolia* | **DICOT** | |
| *Euphorbia trigonosperma* | **DICOT** | |
| *Evolvulus alsinoides* var. *decumbens* | **DICOT** | |
| *Exocarpos latifolius* | **DICOT** | |
| *Faidherbia albida* | **DICOT** | |
| *Ficus aculeata* var. *indecora* | **DICOT** | |
| *Flaveria trinervia* | **DICOT** | **P1** |
| *Flueggea virosa* | **DICOT** | |
| *Flueggea virosa* subsp. *melanthesoides* | **DICOT** | |
| *Galactia tenuiflora* | **DICOT** | |
| *Gamochaeta pensylvanica* | **DICOT** | |
| *Gardenia pyriformis* | **DICOT** | |
| *Gardenia pyriformis* subsp. *keartlandii* | **DICOT** | |
| *Gardenia sp.* | **DICOT** | |
| *Glycine pindanica* | **DICOT** | **P3** |
| *Glycine tomentella* | **DICOT** | |
| *Gnaphalium polycaulon* | **DICOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Gomphrena celosioides* | **DICOT** | |
| *Gomphrena flaccida* | **DICOT** | |
| *Gomphrena pusilla* | **DICOT** | **P2** |
| *Gomphrena sp.* | **DICOT** | |
| *Gomphrena tenella* | **DICOT** | |
| *Goodenia armitiana* | **DICOT** | |
| *Goodenia byrnesii* | **DICOT** | **P3** |
| *Goodenia lamprosperma* | **DICOT** | |
| *Goodenia scaevolina* | **DICOT** | |
| *Goodenia sepalosa* var. *sepalosa* | **DICOT** | |
| *Goodenia sp.* | **DICOT** | |
| *Gossypium australe* | **DICOT** | |
| *Gossypium hirsutum* | **DICOT** | |
| *Gossypium populifolium* | **DICOT** | |
| *Gossypium rotundifolium* | **DICOT** | |
| *Grevillea pyramidalis* subsp. *pyramidalis* | **DICOT** | |
| *Grevillea refracta* subsp. *refracta* | **DICOT** | |
| *Grevillea wickhamii* subsp. *aprica* | **DICOT** | |
| *Grewia breviflora* | **DICOT** | |
| *Grewia retusifolia* | **DICOT** | |
| *Grewia sp.* | **DICOT** | |
| *Guaiacum officinale* | **DICOT** | |
| *Guilleminea densa* | **DICOT** | |
| *Gymnanthera oblonga* | **DICOT** | |
| *Gyrocarpus americanus* | **DICOT** | |
| *Gyrocarpus americanus* subsp. *pachyphyllus* | **DICOT** | |
| *Gyrostemon tepperi* | **DICOT** | |
| *Hakea arborescens* | **DICOT** | |
| *Hakea macrocarpa* | **DICOT** | |
| *Heliotropium curassavicum* | **DICOT** | |
| *Heliotropium foliatum* | **DICOT** | |
| *Heliotropium leptaleum* | **DICOT** | |
| *Heliotropium ovalifolium* | **DICOT** | |
| *Hemichroa diandra* | **DICOT** | |
| *Herissantia crispa* | **DICOT** | |
| *Hibiscus apodus* | **DICOT** | |
| *Hibiscus austrinus* | **DICOT** | |
| *Hibiscus austrinus* var. *austrinus* | **DICOT** | |
| *Hibiscus geranioides* | **DICOT** | |
| *Hibiscus leptocladus* | **DICOT** | |
| *Hibiscus panduriformis* | **DICOT** | **P1** |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Hybanthus aurantiacus* | **DICOT** | |
| *Hypoestes floribunda* var. *varia* | **DICOT** | |
| *Ichnocarpus frutescens* | **DICOT** | |
| *Indigofera colutea* | **DICOT** | |
| *Indigofera hirsuta* | **DICOT** | |
| *Indigofera linifolia* | **DICOT** | |
| *Indigofera linnaei* | **DICOT** | |
| *Ipomoea batatas* | **DICOT** | |
| *Ipomoea cairica* | **DICOT** | |
| *Ipomoea coptica* | **DICOT** | |
| *Ipomoea muelleri* | **DICOT** | |
| *Ipomoea pes-caprae* | **DICOT** | |
| *Ipomoea pes-caprae* subsp. *brasiliensis* | **DICOT** | |
| *Ipomoea pes-caprae* subsp. *pes-caprae* | **DICOT** | |
| *Ipomoea pes-tigridis* | **DICOT** | |
| *Ipomoea polymorpha* | **DICOT** | |
| *Ipomoea triloba* | **DICOT** | |
| *Isotropis atropurpurea* | **DICOT** | |
| *Jacquemontia paniculata* | **DICOT** | |
| *Jacquemontia sp. Broome (A.A. Mitchell 3028)* | **DICOT** | **P1** |
| *Jacquinia pungens* | **DICOT** | |
| *Jasminum didymum* | **DICOT** | |
| *Jasminum didymum* subsp. *lineare* | **DICOT** | |
| *Jatropha gossypiifolia* | **DICOT** | |
| *Khaya anthotheca* | **DICOT** | |
| *Lawsonia inermis* | **DICOT** | |
| *Leptosema anomalum* | **DICOT** | |
| *Leucaena leucocephala* subsp. *leucocephala* | **DICOT** | |
| *Lobelia arnhemiaca* | **DICOT** | |
| *Lumnitzera racemosa* | **DICOT** | |
| *Lysiana spathulata* | **DICOT** | |
| *Lysiana spathulata* subsp. *spathulata* | **DICOT** | |
| *Macroptilium atropurpureum* | **DICOT** | |
| *Mallotus nesophilus* | **DICOT** | |
| *Marsdenia angustata* | **DICOT** | |
| *Marsdenia viridiflora* | **DICOT** | |
| *Marsdenia viridiflora* subsp. *tropica* | **DICOT** | |
| *Mecardonia procumbens* | **DICOT** | |
| *Medicago polymorpha* | **DICOT** | |
| *Melaleuca alsophila* | **DICOT** | |
| *Melaleuca cajaputi* subsp. *cajaputi* | **DICOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Melaleuca cajuputi* | **DICOT** | |
| *Melaleuca cajuputi* subsp. *cajuputi* | **DICOT** | |
| *Melaleuca dealbata* | **DICOT** | |
| *Melaleuca nervosa* | **DICOT** | |
| *Melaleuca nervosa* subsp. *crosslandiana* | **DICOT** | |
| *Melaleuca viridiflora* | **DICOT** | |
| *Melhania oblongifolia* | **DICOT** | |
| *Melicope elleryana* | **DICOT** | |
| *Mesosphaerum suaveolens* | **DICOT** | |
| *Microstachys chamaelea* | **DICOT** | |
| *Miliusa brahei* | **DICOT** | |
| *Mimosa diplotricha* | **DICOT** | |
| *Mitracarpus hirtus* | **DICOT** | |
| *Mitrasacme exserta* | **DICOT** | |
| *Mitrasacme hispida* | **DICOT** | |
| *Momordica balsamina* | **DICOT** | |
| *Moringa drouhardii* | **DICOT** | |
| *Muellerolimon salicorniaceum* | **DICOT** | |
| *Myoporum montanum* | **DICOT** | |
| *Nauclea orientalis* | **DICOT** | |
| *Neobassia astrocarpa* | **DICOT** | |
| *Nicotiana heterantha* | **DICOT** | |
| *Notoleptopus decaisnei* | **DICOT** | |
| *Nymphaea violacea* | **DICOT** | |
| *Ocimum americanum* | **DICOT** | |
| *Ocimum basilicum* | **DICOT** | |
| *Oldenlandia corymbosa* var. *corymbosa* | **DICOT** | |
| *Oldenlandia mitrasacmoides* | **DICOT** | |
| *Oldenlandia mitrasacmoides* subsp. *mitrasacmoides* | **DICOT** | |
| *Operculina aequisepala* | **DICOT** | |
| *Opilia amentacea* | **DICOT** | |
| *Owenia reticulata* | **DICOT** | |
| *Pachyrhizus erosus* | **DICOT** | |
| *Passiflora foetida* | **DICOT** | |
| *Passiflora foetida* var. *hispida* | **DICOT** | |
| *Pavetta kimberleyana* | **DICOT** | |
| *Peltophorum pterocarpum* | **DICOT** | |
| *Peperomia pellucida* | **DICOT** | |
| *Persicaria hydropiper* | **DICOT** | |
| *Persoonia falcata* | **DICOT** | |
| *Phyla nodiflora* | **DICOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Phyllanthus amarus* | **DICOT** | |
| *Phyllanthus eremicus* | **DICOT** | |
| *Phyllanthus maderaspatensis* | **DICOT** | |
| *Phyllanthus sp.* | **DICOT** | |
| *Phyllanthus sp. C* | **DICOT** | |
| *Phyllanthus tenellus* | **DICOT** | |
| *Phyllanthus urinaria* | **DICOT** | |
| *Physalis angulata* | **DICOT** | |
| *Pilea microphylla* | **DICOT** | |
| *Pluchea ferdinandi-muelleri* | **DICOT** | |
| *Pluchea longiseta* | **DICOT** | |
| *Pluchea rubelliflora* | **DICOT** | |
| *Pluchea tetranthera* | **DICOT** | |
| *Polycarpaea corymbosa* | **DICOT** | |
| *Polycarpaea longiflora* | **DICOT** | |
| *Polygala tepperi* | **DICOT** | |
| *Polymeria ambigua* | **DICOT** | |
| *Polymeria sp. Broome (K.F. Kenneally 9759)* | **DICOT** | **P3** |
| *Portulaca filifolia* | **DICOT** | |
| *Portulaca napiformis* | **DICOT** | |
| *Portulaca oleracea* | **DICOT** | |
| *Portulaca pilosa* | **DICOT** | |
| *Portulaca sp.* | **DICOT** | |
| *Praxelis clematidea* | **DICOT** | |
| *Premna acuminata* | **DICOT** | |
| *Prosopis sp.* | **DICOT** | |
| *Psydrax attenuata* var. *tenella* | **DICOT** | |
| *Psydrax pendulina* | **DICOT** | |
| *Pterocaulon intermedium* | **DICOT** | |
| *Pterocaulon paradoxum* | **DICOT** | |
| *Pterocaulon serrulatum* var. *velutinum* | **DICOT** | |
| *Ptilotus calostachyus* | **DICOT** | |
| *Ptilotus exaltatus* | **DICOT** | |
| *Ptilotus fusiformis* | **DICOT** | |
| *Ptilotus lanatus* | **DICOT** | |
| *Ptilotus polystachyus* | **DICOT** | |
| *Raphanus raphanistrum* | **DICOT** | |
| *Rhizophora stylosa* | **DICOT** | |
| *Rhynchosia australis* | **DICOT** | |
| *Rhynchosia minima* | **DICOT** | |
| *Ruellia tuberosa* | **DICOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Salsola australis* | **DICOT** | |
| *Santalum album* | **DICOT** | |
| *Santalum lanceolatum* | **DICOT** | |
| *Sauropus trachyspermus* | **DICOT** | |
| *Scaevola parvifolia* subsp. *parvifolia* | **DICOT** | |
| *Schinus terebinthifolia* | **DICOT** | |
| *Scutellaria indica* | **DICOT** | |
| *Senna costata* | **DICOT** | |
| *Senna glutinosa* subsp. *glutinosa* | **DICOT** | |
| *Senna notabilis* | **DICOT** | |
| *Senna occidentalis* | **DICOT** | |
| *Senna oligoclada* | **DICOT** | |
| *Seringia exastia* | **DICOT** | **CR** |
| *Seringia katatona* | **DICOT** | |
| *Seringia nephrosperma* | **DICOT** | |
| *Sersalisia sericea* | **DICOT** | |
| *Sesbania cannabina* | **DICOT** | |
| *Sesbania formosa* | **DICOT** | |
| *Sesbania simpliciuscula* var. *fitzroyensis* | **DICOT** | |
| *Sesbania sp.* | **DICOT** | |
| *Sesuvium portulacastrum* | **DICOT** | |
| *Sida cordifolia* | **DICOT** | |
| *Sida fibulifera* | **DICOT** | |
| *Sida hackettiana* | **DICOT** | |
| *Sida rohlenae* subsp. *occidentalis* | **DICOT** | |
| *Sida sp. Pindan (B.G. Thomson 3398)* | **DICOT** | |
| *Sida spinosa* | **DICOT** | |
| *Solanum americanum* | **DICOT** | |
| *Solanum beaugleholei* | **DICOT** | |
| *Solanum cunninghamii* | **DICOT** | |
| *Solanum dioicum* | **DICOT** | |
| *Solanum esuriale* | **DICOT** | |
| *Solanum pseudocapsicum* | **DICOT** | |
| *Solanum torvum* | **DICOT** | |
| *Soliva sessilis* | **DICOT** | |
| *Sonchus asper* x *oleraceus* | **DICOT** | |
| *Sonchus oleraceus* | **DICOT** | |
| *Spermacoce dolichosperma* | **DICOT** | |
| *Spermacoce hillii* | **DICOT** | |
| *Spermacoce occidentalis* | **DICOT** | |
| *Spermacoce sp.* | **DICOT** | |



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|---|---|---|
| *Stachytarpheta cayennensis* | **DICOT** | |
| *Stackhousia intermedia* | **DICOT** | |
| *Stemodia florulenta* | **DICOT** | |
| *Stemodia lathraia* | **DICOT** | |
| *Streptoglossa macrocephala* | **DICOT** | |
| *Streptoglossa odora* | **DICOT** | |
| *Striga curviflora* | **DICOT** | |
| *Strobilanthes alternata* | **DICOT** | |
| *Stylidium pindanicum* | **DICOT** | **P3** |
| *Stylosanthes hamata* | **DICOT** | |
| *Stylosanthes scabra* | **DICOT** | |
| *Suaeda arbusculoides* | **DICOT** | |
| *Surreya diandra* | **DICOT** | |
| *Tamarindus indica* | **DICOT** | |
| *Tecticornia auriculata* | **DICOT** | |
| *Tecticornia halocnemoides* | **DICOT** | |
| *Tecticornia halocnemoides* subsp. *tenuis* | **DICOT** | |
| *Tecticornia indica* subsp. *indica* | **DICOT** | |
| *Tecticornia indica* subsp. *julacea* | **DICOT** | |
| *Tecticornia indica* subsp. *leiostachya* | **DICOT** | |
| *Tephrosia crocea* | **DICOT** | |
| *Tephrosia leptoclada* | **DICOT** | |
| *Tephrosia remotiflora* | **DICOT** | |
| *Tephrosia rosea* | **DICOT** | |
| *Tephrosia rosea* var. *rosea* | **DICOT** | |
| *Tephrosia simplicifolia* | **DICOT** | |
| *Terminalia ferdinandiana* | **DICOT** | |
| *Terminalia grandiflora* | **DICOT** | |
| *Terminalia hadleyana* | **DICOT** | |
| *Terminalia hadleyana* x *petiolaris* | **DICOT** | |
| *Terminalia kumpaja* | **DICOT** | **P3** |
| *Terminalia latipes* | **DICOT** | |
| *Terminalia petiolaris* | **DICOT** | |
| *Tetragonia coronata* | **DICOT** | **P3** |
| *Thespesia populneoides* | **DICOT** | |
| *Thespidium basiflorum* | **DICOT** | **P1** |
| *Timonius timon* | **DICOT** | |
| *Tinospora smilacina* | **DICOT** | |
| *Trianthema pilosum* | **DICOT** | |
| *Trianthema portulacastrum* | **DICOT** | |
| *Trianthema triquetrum* | **DICOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Tribulopis angustifolia* | **DICOT** | |
| *Tribulus angustifolia* | **DICOT** | |
| *Tribulus cistoides* | **DICOT** | |
| *Tribulus occidentalis* | **DICOT** | |
| *Tribulus sp.* | **DICOT** | |
| *Tribulus terrestris* | **DICOT** | |
| *Trichodesma zeylanicum* | **DICOT** | |
| *Trichodesma zeylanicum* var. *latisepaleum* | **DICOT** | |
| *Tridax procumbens* | **DICOT** | |
| *Trifolium cernuum* | **DICOT** | |
| *Triphasia trifoliata* | **DICOT** | |
| *Triumfetta pentandra* | **DICOT** | |
| *Uraria lagopodioides* | **DICOT** | |
| *Velleia panduriformis* | **DICOT** | |
| *Ventilago viminalis* | **DICOT** | |
| *Verbesina encelioides* | **DICOT** | |
| *Verbesina encelioides* var. *encelioides* | **DICOT** | |
| *Vigna radiata* var. *sublobata* | **DICOT** | |
| *Vincetoxicum carnosum* | **DICOT** | |
| *Vincetoxicum cinerascens* | **DICOT** | |
| *Wahlenbergia sp.* | **DICOT** | |
| *Waltheria indica* | **DICOT** | |
| *Wrightia saligna* | **DICOT** | |
| *Ziziphus mauritiana* | **DICOT** | |
| *Zornia chaetophora* | **DICOT** | |
| *Zornia muelleriana* subsp. *congesta* | **DICOT** | |
| *Zornia prostrata var. prostrata* | **DICOT** | |
| *Acrostichum speciosum* | **FERN** | |
| *Ceratopteris thalictroides* | **FERN** | |
| *Marsilea hirsuta* | **FERN** | |
| *Riccia limbata* | **LIVERWORT** | |
| *Aristida holathera* var. *latifolia* | **MONOCOT** | |
| *Aristida hygrometrica* | **MONOCOT** | |
| *Aristida inaequiglumis* | **MONOCOT** | |
| *Bothriochloa bladhii* | **MONOCOT** | |
| *Bothriochloa pertusa* | **MONOCOT** | |
| *Bulbostylis barbata* | **MONOCOT** | |
| *Callisia repens* | **MONOCOT** | |
| *Caryota mitis* | **MONOCOT** | |
| *Cenchrus americanus* | **MONOCOT** | |
| *Cenchrus biflorus* | **MONOCOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Cenchrus ciliaris* | **MONOCOT** | |
| *Cenchrus echinatus* | **MONOCOT** | |
| *Cenchrus purpurascens* | **MONOCOT** | |
| *Cenchrus setiger* | **MONOCOT** | |
| *Chloris barbata* | **MONOCOT** | |
| *Chloris pumilio* | **MONOCOT** | |
| *Chloris virgata* | **MONOCOT** | |
| *Chrysopogon aciculatus* | **MONOCOT** | |
| *Chrysopogon pallidus* | **MONOCOT** | |
| *Corynotheca micrantha* | **MONOCOT** | |
| *Corynotheca micrantha* var. *gracilis* | **MONOCOT** | |
| *Cymbidium canaliculatum* | **MONOCOT** | |
| *Cymodocea angustata* | **MONOCOT** | |
| *Cynodon convergens* | **MONOCOT** | |
| *Cynodon dactylon* | **MONOCOT** | |
| *Cyperus blakeanus* | **MONOCOT** | |
| *Cyperus bulbosus* | **MONOCOT** | |
| *Cyperus compressus* | **MONOCOT** | |
| *Cyperus conicus* | **MONOCOT** | |
| *Cyperus rotundus* | **MONOCOT** | |
| *Cyperus scariosus* | **MONOCOT** | |
| *Cyperus squarrosus* | **MONOCOT** | |
| *Dactyloctenium aegyptium* | **MONOCOT** | |
| *Dactyloctenium radulans* | **MONOCOT** | |
| *Digitaria bicornis* | **MONOCOT** | |
| *Digitaria ciliaris* | **MONOCOT** | |
| *Digitaria ctenantha* | **MONOCOT** | |
| *Digitaria radicosa* | **MONOCOT** | |
| *Ectrosia danesii* | **MONOCOT** | |
| *Eleusine indica* | **MONOCOT** | |
| *Enneapogon pallidus* | **MONOCOT** | |
| *Epipremnum sp.* | **MONOCOT** | |
| *Eragrostis cilianensis* | **MONOCOT** | |
| *Eragrostis cumingii* | **MONOCOT** | |
| *Eragrostis eriopoda* | **MONOCOT** | |
| *Eragrostis falcata* | **MONOCOT** | |
| *Eragrostis minor* | **MONOCOT** | |
| *Eragrostis sp.* | **MONOCOT** | |
| *Eragrostis tenuifolia* | **MONOCOT** | **P3** |
| *Eriachne melicacea* | **MONOCOT** | |
| *Eriachne obtusa* | **MONOCOT** | |


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| TAXON | CLASS | CONS |
|---|---|---|
| *Eriachne pindanica* | **MONOCOT** | |
| *Fimbristylis ammobia* | **MONOCOT** | |
| *Fimbristylis caespitosa* | **MONOCOT** | |
| *Fimbristylis cymosa* | **MONOCOT** | |
| *Fimbristylis oxystachya* | **MONOCOT** | |
| *Halodule pinifolia* | **MONOCOT** | |
| *Halodule sp.* | **MONOCOT** | |
| *Halodule uninervis* | **MONOCOT** | |
| *Halophila minor* | **MONOCOT** | |
| *Halophila ovalis* | **MONOCOT** | |
| *Halophila sp.* | **MONOCOT** | |
| *Halophila spinulosa* | **MONOCOT** | |
| *Heteropogon contortus* | **MONOCOT** | |
| *Hydrilla verticillata* | **MONOCOT** | |
| *Landoltia punctata* | **MONOCOT** | |
| *Lemna aequinoctialis* | **MONOCOT** | |
| *Leptochloa fusca* subsp. *fusca* | **MONOCOT** | |
| *Lolium perenne* | **MONOCOT** | |
| *Murdannia graminea* | **MONOCOT** | |
| *Najas tenuifolia* | **MONOCOT** | |
| *Pandanus spiralis* | **MONOCOT** | |
| *Panicum decompositum* | **MONOCOT** | |
| *Panicum effusum* | **MONOCOT** | |
| *Panicum mindanaense* | **MONOCOT** | |
| *Paspalidium rarum* | **MONOCOT** | |
| *Paspalum distichum* | **MONOCOT** | |
| *Paspalum vaginatum* | **MONOCOT** | |
| *Perotis rara* | **MONOCOT** | |
| *Pistia stratiotes* | **MONOCOT** | |
| *Pterostylis sp. inland (A.C. Beauglehole 11880)* | **MONOCOT** | |
| *Schizachyrium fragile* | **MONOCOT** | |
| *Schoenus falcatus* | **MONOCOT** | |
| *Scleria brownii* | **MONOCOT** | |
| *Scleria sp.* | **MONOCOT** | |
| *Setaria surgens* | **MONOCOT** | |
| *Setaria verticillata* | **MONOCOT** | |
| *Sorghum interjectum* | **MONOCOT** | |
| *Sorghum plumosum* | **MONOCOT** | |
| *Sorghum stipoideum* | **MONOCOT** | |
| *Sorghum timorense* | **MONOCOT** | |
| *Spinifex longifolius* | **MONOCOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Sporobolus australasicus* | **MONOCOT** | |
| *Sporobolus mitchellii* | **MONOCOT** | |
| *Sporobolus virginicus* | **MONOCOT** | |
| *Thaumastochloa pubescens* | **MONOCOT** | |
| *Themeda quadrivalvis* | **MONOCOT** | |
| *Thrinax parviflora* | **MONOCOT** | |
| *Triodia caelestialis* | **MONOCOT** | |
| *Triodia epactia* | **MONOCOT** | |
| *Triodia microstachya* | **MONOCOT** | |
| *Triodia schinzii* | **MONOCOT** | |
| *Urochloa mosambicensis* | **MONOCOT** | |
| *Urochloa piligera* | **MONOCOT** | |
| *Urochloa praetervisa* | **MONOCOT** | |
| *Urochloa pubigera* | **MONOCOT** | |
| *Urochloa subquadripara* | **MONOCOT** | |
| *Whiteochloa airoides* | **MONOCOT** | |
| *Whiteochloa cymbiformis* | **MONOCOT** | |
| *Xerochloa barbata* | **MONOCOT** | |
| *Xerochloa imberbis* | **MONOCOT** | |
| *Xerochloa sp.* | **MONOCOT** | |
| *Yakirra australiensis* | **MONOCOT** | |
| *Yakirra pauciflora* | **MONOCOT** | |



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*Vertebrate Fauna Nature Map Desktop Result – Halls Creek*

| TAXON | CLASS | CONS |
|---|---|---|
| *Accipiter cirrocephalus* | **BIRD** | |
| *Accipiter fasciatus* | **BIRD** | |
| *Actitis hypoleucos* | **BIRD** | **MI** |
| *Aegotheles cristatus* | **BIRD** | |
| *Aegotheles cristatus* subsp. *leucogaster* | **BIRD** | |
| *Anas gracilis* | **BIRD** | |
| *Anas superciliosa* | **BIRD** | |
| *Anhinga novaehollandiae* | **BIRD** | |
| *Anseranas semipalmata* | **BIRD** | |
| *Aprosmictus erythropterus* | **BIRD** | |
| *Aquila audax* | **BIRD** | |
| *Ardea intermedia* | **BIRD** | |
| *Ardea modesta* | **BIRD** | |
| *Ardea pacifica* | **BIRD** | |
| *Artamus cinereus* | **BIRD** | |
| *Artamus leucorynchus* | **BIRD** | |
| *Artamus minor* | **BIRD** | |
| *Artamus personatus* | **BIRD** | |
| *Aythya australis* | **BIRD** | |
| *Burhinus grallarius* | **BIRD** | |
| *Cacatua galerita* | **BIRD** | |
| *Cacatua sanguinea* | **BIRD** | |
| *Cacomantis pallidus* | **BIRD** | |
| *Calidris acuminata* | **BIRD** | **MI** |
| *Calidris ferruginea* | **BIRD** | **CR** |
| *Calyptorhynchus banksii* | **BIRD** | |
| *Centropus phasianinus* | **BIRD** | |
| *Ceyx azureus* | **BIRD** | |
| *Charadrius leschenaultii* | **BIRD** | **VU** |
| *Chlidonias leucopterus* | **BIRD** | **MI** |
| *Cincloramphus cruralis* | **BIRD** | |
| *Cincloramphus mathewsi* | **BIRD** | |
| *Circus approximans* | **BIRD** | |
| *Circus assimilis* | **BIRD** | |
| *Cisticola exilis* | **BIRD** | |
| *Climacteris melanura* | **BIRD** | |
| *Climacteris melanura* subsp. *melanura* | **BIRD** | |
| *Colluricincla harmonica* | **BIRD** | |
| *Colluricincla woodwardi* | **BIRD** | |
| *Columba livia* | **BIRD** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Conopophila rufogularis* | **BIRD** | |
| *Coracina maxima* | **BIRD** | |
| *Coracina novaehollandiae* | **BIRD** | |
| *Coracina papuensis* | **BIRD** | |
| *Corvus bennetti* | **BIRD** | |
| *Corvus orru* | **BIRD** | |
| *Coturnix ypsilophora* | **BIRD** | |
| *Cracticus nigrogularis* | **BIRD** | |
| *Cracticus tibicen* | **BIRD** | |
| *Cracticus torquatus* | **BIRD** | |
| *Cygnus atratus* | **BIRD** | |
| *Dacelo leachii* | **BIRD** | |
| *Daphoenositta chrysoptera* | **BIRD** | |
| *Dendrocygna eytoni* | **BIRD** | |
| *Dicaeum hirundinaceum* | **BIRD** | |
| *Egretta garzetta* | **BIRD** | |
| *Egretta novaehollandiae* | **BIRD** | |
| *Elanus axillaris* | **BIRD** | |
| *Elseyornis melanops* | **BIRD** | |
| *Emblema pictum* | **BIRD** | |
| *Entomyzon cyanotis* | **BIRD** | |
| *Eolophus roseicapillus* | **BIRD** | |
| *Ephippiorhynchus asiaticus* | **BIRD** | |
| *Eremiornis carteri* | **BIRD** | |
| *Erythrogonys cinctus* | **BIRD** | |
| *Erythrura gouldiae* | **BIRD** | **P4** |
| *Eurostopodus argus* | **BIRD** | |
| *Eurystomus orientalis* | **BIRD** | |
| *Falco berigora* | **BIRD** | |
| *Falco cenchroides* | **BIRD** | |
| *Falco longipennis* | **BIRD** | |
| *Falco subniger* | **BIRD** | |
| *Gelochelidon nilotica* | **BIRD** | **MI** |
| *Geopelia cuneata* | **BIRD** | |
| *Geopelia humeralis* | **BIRD** | |
| *Geopelia striata* | **BIRD** | |
| *Geopelia striata* subsp. *placida* | **BIRD** | |
| *Geophaps plumifera* | **BIRD** | |
| *Grallina cyanoleuca* | **BIRD** | |
| *Grus rubicunda* | **BIRD** | |
| *Haliastur sphenurus* | **BIRD** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Hamirostra melanosternon* | **BIRD** | |
| *Heteromunia pectoralis* | **BIRD** | |
| *Hieraaetus morphnoides* | **BIRD** | |
| *Himantopus himantopus* | **BIRD** | |
| *Hirundo neoxena* | **BIRD** | |
| *Lalage leucomela* | **BIRD** | |
| *Lichenostomus flavescens* | **BIRD** | |
| *Lichenostomus keartlandi* | **BIRD** | |
| *Lichenostomus penicillatus* | **BIRD** | |
| *Lichenostomus plumulus* | **BIRD** | |
| *Lichenostomus unicolor* | **BIRD** | |
| *Lichenostomus virescens* | **BIRD** | |
| *Lichmera indistincta* | **BIRD** | |
| *Limosa limosa* | **BIRD** | **MI** |
| *Lophoictinia isura* | **BIRD** | |
| *Malacorhynchus membranaceus* | **BIRD** | |
| *Malurus lamberti* | **BIRD** | |
| *Malurus melanocephalus* | **BIRD** | |
| *Malurus melanocephalus* subsp. *cruentatus* | **BIRD** | |
| *Manorina flavigula* | **BIRD** | |
| *Melanodryas cucullata* | **BIRD** | |
| *Melithreptus albogularis* | **BIRD** | |
| *Melithreptus gularis* | **BIRD** | |
| *Melithreptus gularis* subsp. *laetior* | **BIRD** | |
| *Melopsittacus undulatus* | **BIRD** | |
| *Merops ornatus* | **BIRD** | |
| *Microcarbo melanoleucos* | **BIRD** | |
| *Microeca fascinans* | **BIRD** | |
| *Microeca fascinans* subsp. *fascinans* | **BIRD** | |
| *Milvus migrans* | **BIRD** | |
| *Mirafra javanica* | **BIRD** | |
| *Myiagra inquieta* | **BIRD** | |
| *Neochmia phaeton* | **BIRD** | |
| *Ninox novaeseelandiae* | **BIRD** | |
| *Nycticorax caledonicus* | **BIRD** | |
| *Nymphicus hollandicus* | **BIRD** | |
| *Ocyphaps lophotes* | **BIRD** | |
| *Oreoica gutturalis* | **BIRD** | |
| *Oriolus sagittatus* | **BIRD** | |
| *Pachycephala rufiventris* | **BIRD** | |
| *Pardalotus rubricatus* | **BIRD** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Pardalotus striatus* | **BIRD** | |
| *Pelecanus conspicillatus* | **BIRD** | |
| *Petrochelidon ariel* | **BIRD** | |
| *Petrochelidon nigricans* | **BIRD** | |
| *Phalacrocorax sulcirostris* | **BIRD** | |
| *Phalacrocorax varius* | **BIRD** | |
| *Philemon citreogularis* | **BIRD** | |
| *Platalea regia* | **BIRD** | |
| *Platycercus venustus* | **BIRD** | |
| *Podargus strigoides* | **BIRD** | |
| *Poephila acuticauda* | **BIRD** | |
| *Poephila personata* | **BIRD** | |
| *Poliocephalus poliocephalus* | **BIRD** | |
| *Pomatostomus temporalis* | **BIRD** | |
| *Pomatostomus temporalis* subsp. *rubeculus* | **BIRD** | |
| *Porphyrio porphyrio* | **BIRD** | |
| *Psitteuteles versicolor* | **BIRD** | |
| *Ptilonorhynchus nuchalis* | **BIRD** | |
| *Ptilonorhynchus nuchalis* subsp. *nuchalis* | **BIRD** | |
| *Ptilotula penicillatus* | **BIRD** | |
| *Ptilotula plumulus* | **BIRD** | |
| *Recurvirostra novaehollandiae* | **BIRD** | |
| *Rhipidura albiscapa* | **BIRD** | |
| *Rhipidura leucophrys* | **BIRD** | |
| *Smicrornis brevirostris* | **BIRD** | |
| *Stiltia isabella* | **BIRD** | |
| *Tachybaptus novaehollandiae* | **BIRD** | |
| *Tadorna radjah* | **BIRD** | |
| *Taeniopygia bichenovii* | **BIRD** | |
| *Taeniopygia guttata* | **BIRD** | |
| *Threskiornis molucca* | **BIRD** | |
| *Threskiornis spinicollis* | **BIRD** | |
| *Todiramphus pyrrhopygius* | **BIRD** | |
| *Todiramphus sanctus* | **BIRD** | |
| *Tringa glareola* | **BIRD** | **MI** |
| *Tringa stagnatilis* | **BIRD** | **MI** |
| *Turnix velox* | **BIRD** | |
| *Vanellus miles* | **BIRD** | |
| *Leiopotherapon unicolor* | **FISH** | |
| *Nematalosa sp.* | **FISH** | |
| *Onychogalea unguifera* | **MAMMAL** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Trichosurus vulpecula* subsp. *arnhemensis* | **MAMMAL** | **VU** |
| *Amalosia rhombifer* | **REPTILE** | |
| *Amphibolurus gilberti* | **REPTILE** | |
| *Antaresia childreni* | **REPTILE** | |
| *Chlamydosaurus kingii* | **REPTILE** | |
| *Crocodylus johnstoni* | **REPTILE** | **OS** |
| *Ctenophorus caudicinctus* subsp. *macropus* | **REPTILE** | |
| *Ctenophorus nuchalis* | **REPTILE** | |
| *Ctenotus militaris* | **REPTILE** | |
| *Ctenotus pantherinus* subsp. *calx* | **REPTILE** | |
| *Ctenotus saxatilis* | **REPTILE** | |
| *Delma nasuta* | **REPTILE** | |
| *Demansia shinei* | **REPTILE** | |
| *Diporiphora arnhemica* | **REPTILE** | |
| *Diporiphora bennettii* | **REPTILE** | |
| *Diporiphora lalliae* | **REPTILE** | |
| *Diporiphora sp.* | **REPTILE** | |
| *Furina ornata* | **REPTILE** | |
| *Gehyra pilbara* | **REPTILE** | |
| *Heteronotia binoei* | **REPTILE** | |
| *Nephrurus sheai* | **REPTILE** | |
| *Pseudechis australis* | **REPTILE** | |
| *Pseudonaja modesta* | **REPTILE** | |
| *Pseudonaja textilis* | **REPTILE** | |
| *Ramphotyphlops diversus* | **REPTILE** | |
| *Ramphotyphlops guentheri* | **REPTILE** | |
| *Varanus mertensi* | **REPTILE** | |
| *Uperoleia borealis* | **AMPHIBIAN** | |



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*Terrestrial Flora Nature Map Desktop Result for Halls Creek*

| TAXON | CLASS | CONS |
|---|---|---|
| *Abutilon leucopetalum* | **DICOT** | |
| *Abutilon otocarpum* | **DICOT** | |
| *Acacia acradenia* | **DICOT** | |
| *Acacia adoxa* var. *adoxa* | **DICOT** | |
| *Acacia ampliceps* | **DICOT** | |
| *Acacia ancistrocarpa* | **DICOT** | |
| *Acacia calligera* | **DICOT** | |
| *Acacia colei* | **DICOT** | |
| *Acacia colei* (Typical variant) | **DICOT** | |
| *Acacia colei* var. *colei* | **DICOT** | |
| *Acacia colei* var. *ileocarpa* | **DICOT** | |
| *Acacia elachantha* | **DICOT** | |
| *Acacia elachantha* (Golden hairy variant) | **DICOT** | |
| *Acacia elachantha (*Hairy variant) | **DICOT** | |
| *Acacia hemignosta* | **DICOT** | |
| *Acacia lycopodiifolia* | **DICOT** | |
| *Acacia lysiphloia* | **DICOT** | |
| *Acacia monticola* | **DICOT** | |
| *Acacia neurocarpa* | **DICOT** | |
| *Acacia orthocarpa* | **DICOT** | |
| *Acacia retivenea* subsp. *retivenea* | **DICOT** | |
| *Acacia sp. (Lycopodiifoliae)* | **DICOT** | |
| *Acacia sp. Urandangie* (L. Pedley 2025) | **DICOT** | |
| *Acacia stipuligera* | **DICOT** | |
| *Acacia synchronicia* | **DICOT** | |
| *Acacia thomsonii* | **DICOT** | |
| *Acacia tumida* var. *tumida* | **DICOT** | |
| *Acacia wickhamii* subsp. *wickhamii* | **DICOT** | |
| *Aerva javanica* | **DICOT** | |
| *Alysicarpus muelleri* | **DICOT** | |
| *Amaranthus pallidiflorus* | **DICOT** | |
| *Ammannia multiflora* | **DICOT** | |
| *Amyema eburna* | **DICOT** | |
| *Anisomeles farinacea* | **DICOT** | |
| *Atalaya hemiglauca* | **DICOT** | |
| *Bauhinia cunninghamii* | **DICOT** | |
| *Bergia pedicellaris* | **DICOT** | |
| *Blumea axillaris* | **DICOT** | |
| *Boerhavia paludosa* | **DICOT** | |
| *Bonamia pannosa* | **DICOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Bridelia tomentosa* | **DICOT** | |
| *Cajanus crassicaulis* | **DICOT** | |
| *Cajanus pubescens* | **DICOT** | |
| *Canavalia papuana* | **DICOT** | |
| *Capparis umbonata* | **DICOT** | |
| *Carissa lanceolata* | **DICOT** | |
| *Cascabela thevetia* | **DICOT** | |
| *Corchorus sidoides* | **DICOT** | |
| *Corymbia aspera* | **DICOT** | |
| *Corymbia dichromophloia* | **DICOT** | |
| *Corymbia flavescens* | **DICOT** | |
| *Corymbia pachycarpa* | **DICOT** | |
| *Crotalaria dissitiflora* subsp. *rugosa* | **DICOT** | |
| *Crotalaria medicaginea* var. *neglecta* | **DICOT** | |
| *Crotalaria montana* | **DICOT** | |
| *Crotalaria novae-hollandiae* subsp. *novae-hollandiae* | **DICOT** | |
| *Crotalaria retusa* | **DICOT** | |
| *Crotalaria spectabilis* | **DICOT** | |
| *Crotalaria verrucosa* | **DICOT** | |
| *Cullen balsamicum* | **DICOT** | |
| *Cullen leucanthum* | **DICOT** | |
| *Cullen plumosum* | **DICOT** | |
| *Cynanchum floribundum* | **DICOT** | |
| *Dentella asperata* | **DICOT** | |
| *Dicliptera armata* | **DICOT** | |
| *Diplatia grandibractea* | **DICOT** | |
| *Dodonaea polyzyga* | **DICOT** | |
| *Dysphania rhadinostachya* | **DICOT** | |
| *Einadia nutans* subsp. *eremaea* | **DICOT** | |
| *Eucalyptus brevifolia* | **DICOT** | |
| *Eucalyptus cupularis* | **DICOT** | |
| *Eucalyptus leucophylla* | **DICOT** | |
| *Eucalyptus tephrodes* | **DICOT** | |
| *Euphorbia australis* var. *subtomentosa* | **DICOT** | |
| *Euphorbia cinerea* | **DICOT** | |
| *Euphorbia hirta* | **DICOT** | |
| *Euphorbia schizolepis* | **DICOT** | |
| *Euphorbia tannensis* subsp. *eremophila* | **DICOT** | |
| *Euphorbia trigonosperma* | **DICOT** | |
| *Evolvulus alsinoides* var. *decumbens* | **DICOT** | |
| *Evolvulus alsinoides* var. *villosicalyx* | **DICOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Flemingia pauciflora* | **DICOT** | |
| *Gomphrena affinis* subsp. *affinis* | **DICOT** | |
| *Gomphrena canescens* subsp. *canescens* | **DICOT** | |
| *Gomphrena lanata* | **DICOT** | |
| *Gomphrena leptoclada* subsp. *leptoclada* | **DICOT** | |
| *Goodenia crenata* | **DICOT** | **P3** |
| *Goodenia odonnellii* | **DICOT** | |
| *Gossypium australe* | **DICOT** | |
| *Grevillea pyramidalis* subsp. *leucadendron* | **DICOT** | |
| *Grevillea wickhamii* subsp. *aprica* | **DICOT** | |
| *Heliotropium conocarpum* | **DICOT** | |
| *Heliotropium cunninghamii* | **DICOT** | |
| *Heliotropium epacrideum* | **DICOT** | |
| *Heliotropium glabellum* | **DICOT** | |
| *Heliotropium pachyphyllum* | **DICOT** | |
| *Heliotropium tanythrix* | **DICOT** | |
| *Hibiscus austrinus* | **DICOT** | |
| *Hibiscus leptocladus* | **DICOT** | |
| *Hybanthus enneaspermus* subsp. *enneaspermus* | **DICOT** | |
| *Indigastrum parviflorum* | **DICOT** | |
| *Indigofera colutea* | **DICOT** | |
| *Indigofera hirsuta* | **DICOT** | |
| *Indigofera linnaei* | **DICOT** | |
| *Indigofera trita* subsp. *trita* | **DICOT** | |
| *Ipomoea costata* | **DICOT** | |
| *Jacquemontia browniana* | **DICOT** | |
| *Jacquemontia pannosa* | **DICOT** | |
| *Jasminum didymum* subsp. *lineare* | **DICOT** | |
| *Lepidium pholidogynum* | **DICOT** | |
| *Lophostemon grandiflorus* subsp. *riparius* | **DICOT** | |
| *Lysiana subfalcata* | **DICOT** | |
| *Malvastrum americanum* | **DICOT** | |
| *Marsdenia angustata* | **DICOT** | |
| *Melaleuca bracteata* | **DICOT** | |
| *Melaleuca minutifolia* | **DICOT** | |
| *Melhania oblongifolia* | **DICOT** | |
| *Melhania sp.* | **DICOT** | |
| *Mitrasacme nudicaulis* var. *nudicaulis* | **DICOT** | |
| *Myriophyllum verrucosum* | **DICOT** | |
| *Neptunia dimorphantha* | **DICOT** | |
| *Nomismia rhomboidea* | **DICOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Ocimum caryophyllinum* | **DICOT** | |
| *Oldenlandia pterospora* | **DICOT** | |
| *Pentalepis trichodesmoides* subsp. *incana* | **DICOT** | **P1** |
| *Phyllanthus maderaspatensis* | **DICOT** | |
| *Polygala crassitesta* | **DICOT** | **P1** |
| *Polymeria ambigua* | **DICOT** | |
| *Portulaca oleracea* | **DICOT** | |
| *Portulaca sp.* | **DICOT** | |
| *Premna acuminata* | **DICOT** | |
| *Pterocaulon niveum* | **DICOT** | |
| *Ptilotus calostachyus* | **DICOT** | |
| *Ptilotus capitatus* | **DICOT** | |
| *Ptilotus corymbosus* | **DICOT** | |
| *Ptilotus exaltatus* | **DICOT** | |
| *Ptilotus fusiformis* | **DICOT** | |
| *Ptilotus spicatus* | **DICOT** | |
| *Rhynchosia minima* | **DICOT** | |
| *Scaevola browniana* subsp. *browniana* | **DICOT** | |
| *Senna artemisioides* subsp. *oligophylla* | **DICOT** | |
| *Senna notabilis* | **DICOT** | |
| *Senna sp.* | **DICOT** | |
| *Senna symonii* | **DICOT** | |
| *Sida rohlenae* subsp. *rohlenae* | **DICOT** | |
| *Sida spinosa* | **DICOT** | |
| *Solanum lasiophyllum* | **DICOT** | |
| *Solanum lucani* | **DICOT** | |
| *Solanum quadriloculatum* | **DICOT** | |
| *Stackhousia intermedia* | **DICOT** | |
| *Stylidium fluminense* | **DICOT** | |
| *Tamarix aphylla* | **DICOT** | |
| *Tecticornia indica* subsp. *leiostachya* | **DICOT** | |
| *Tephrosia brachyodon* var. *longifolia* | **DICOT** | |
| *Tephrosia rosea* | **DICOT** | |
| *Tephrosia sp. F Kimberley Flora* (B.R. Maslin 5139) | **DICOT** | |
| *Tephrosia sp. Kununurra* (T. Handasyde TH00 250) | **DICOT** | **P2** |
| *Tephrosia sp. Northern* (K.F. Kenneally 11950) | **DICOT** | |
| *Tephrosia stipuligera* | **DICOT** | |
| *Tephrosia virens* | **DICOT** | |
| *Terminalia platyphylla* | **DICOT** | |
| *Timonius timon* | **DICOT** | |
| *Tinospora smilacina* | **DICOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Trachymene dusenii* | **DICOT** | **P3** |
| *Trachymene oleracea* subsp. *oleracea* | **DICOT** | |
| *Trianthema oxycalyptrum* var. *oxycalyptrum* | **DICOT** | |
| *Trianthema triquetrum* | **DICOT** | |
| *Tribulopis angustifolia* | **DICOT** | |
| *Tribulus terrestris* | **DICOT** | |
| *Trichodesma zeylanicum* | **DICOT** | |
| *Trichodesma zeylanicum* var. *zeylanicum* | **DICOT** | |
| *Tridax procumbens* | **DICOT** | |
| *Trigastrotheca molluginea* | **DICOT** | |
| *Triumfetta antrorsa* | **DICOT** | |
| *Vachellia farnesiana* | **DICOT** | |
| *Ventilago viminalis* | **DICOT** | |
| *Waltheria indica* | **DICOT** | |
| *Zornia albiflora* | **DICOT** | |
| *Zornia sp.* | **DICOT** | |
| *Aristida hygrometrica* | **MONOCOT** | |
| *Aristida pruinosa* | **MONOCOT** | |
| *Arundinella nepalensis* | **MONOCOT** | |
| *Bothriochloa ewartiana* | **MONOCOT** | |
| *Chrysopogon fallax* | **MONOCOT** | |
| *Cymbopogon bombycinus* | **MONOCOT** | |
| *Cyperus dactylotes* | **MONOCOT** | |
| *Cyperus microcephalus* subsp. *chersophilus* | **MONOCOT** | |
| *Cyperus vaginatus* | **MONOCOT** | |
| *Enneapogon lindleyanus* | **MONOCOT** | |
| *Enneapogon polyphyllus* | **MONOCOT** | |
| *Eragrostis cumingii* | **MONOCOT** | |
| *Eriachne ciliata* | **MONOCOT** | |
| *Eriachne obtusa* | **MONOCOT** | |
| *Heteropogon contortus* | **MONOCOT** | |
| *Imperata cylindrica* | **MONOCOT** | |
| *Iseilema vaginiflorum* | **MONOCOT** | |
| *Oxychloris scariosa* | **MONOCOT** | |
| *Paspalidium retiglume* | **MONOCOT** | **P2** |
| *Pennisetum arnhemicum* | **MONOCOT** | |
| *Perotis rara* | **MONOCOT** | |
| *Pseudochaetochloa australiensis* | **MONOCOT** | |
| *Schizachyrium pseudeulalia* | **MONOCOT** | |
| *Sehima nervosum* | **MONOCOT** | |
| *Sorghum stipoideum* | **MONOCOT** | |



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| TAXON | CLASS | CONS |
|---|---|---|
| *Sporobolus australasicus* | **MONOCOT** | |
| *Triodia inaequiloba* | **MONOCOT** | |
| *Triodia wiseana* | **MONOCOT** | |
| *Xerochloa barbata* | **MONOCOT** | |
| *Xerochloa imberbis* | **MONOCOT** | |



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# EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 15-Jan-2024

Summary
Details
- Matters of NES
- Other Matters Protected by the EPBC Act
- Extra Information

Caveat
Acknowledgements

# Summary

## Matters of National Environment Significance

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

| | |
|---|---|
| World Heritage Properties: | None |
| National Heritage Places: | 1 |
| Wetlands of International Importance (Ramsar | None |
| Great Barrier Reef Marine Park: | None |
| Commonwealth Marine Area: | None |
| Listed Threatened Ecological Communities: | None |
| Listed Threatened Species: | 19 |
| Listed Migratory Species: | 17 |

## Other Matters Protected by the EPBC Act

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

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

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

| | |
|---|---|
| Commonwealth Lands: | None |
| Commonwealth Heritage Places: | None |
| Listed Marine Species: | 22 |
| Whales and Other Cetaceans: | None |
| Critical Habitats: | None |
| Commonwealth Reserves Terrestrial: | None |
| Australian Marine Parks: | None |
| Habitat Critical to the Survival of Marine Turtles: | None |

## Extra Information

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

| | |
|---|---|
| State and Territory Reserves: | None |
| Regional Forest Agreements: | None |
| Nationally Important Wetlands: | 1 |
| EPBC Act Referrals: | 1 |
| Key Ecological Features (Marine): | None |
| Biologically Important Areas: | 2 |
| Bioregional Assessments: | None |
| Geological and Bioregional Assessments: | None |

# Details

## Matters of National Environmental Significance

### National Heritage Places [ Resource Information ]

| Name | State | Legal Status | Buffer Status |
|---|---|---|---|
| Natural | | | |
| The West Kimberley | WA | Listed place | In buffer area only |

### Listed Threatened Species [ Resource Information ]

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

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| BIRD | | | |
| Calidris acuminata<br>Sharp-tailed Sandpiper [874] | Vulnerable | Species or species habitat likely to occur within area | In feature area |
| Calidris ferruginea<br>Curlew Sandpiper [856] | Critically Endangered | Species or species habitat likely to occur within area | In feature area |
| Erythrotriorchis radiatus<br>Red Goshawk [942] | Endangered | Species or species habitat may occur within area | In feature area |
| Erythrura gouldiae<br>Gouldian Finch [413] | Endangered | Species or species habitat may occur within area | In feature area |
| Falco hypoleucos<br>Grey Falcon [929] | Vulnerable | Species or species habitat likely to occur within area | In feature area |
| Malurus coronatus coronatus<br>Purple-crowned Fairy-wren (western) [64442] | Endangered | Species or species habitat may occur within area | In buffer area only |
| Pezoporus occidentalis<br>Night Parrot [59350] | Endangered | Species or species habitat may occur within area | In feature area |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Polytelis alexandrae<br>Princess Parrot, Alexandra's Parrot [758] | Vulnerable | Species or species habitat may occur within area | In feature area |
| Rostratula australis<br>Australian Painted Snipe [77037] | Endangered | Species or species habitat likely to occur within area | In feature area |
| Tringa nebularia<br>Common Greenshank, Greenshank [832] | Endangered | Species or species habitat likely to occur within area | In buffer area only |
| MAMMAL | | | |
| Macroderma gigas<br>Ghost Bat [174] | Vulnerable | Species or species habitat likely to occur within area | In feature area |
| Macrotis lagotis<br>Greater Bilby [282] | Vulnerable | Species or species habitat likely to occur within area | In feature area |
| Petrogale lateralis kimberleyensis<br>Wiliji, West Kimberley Rock-wallaby [90832] | Endangered | Species or species habitat known to occur within area | In feature area |
| Trichosurus vulpecula arnhemensis<br>Northern Brushtail Possum [83091] | Vulnerable | Species or species habitat may occur within area | In feature area |
| REPTILE | | | |
| Liopholis kintorei<br>Great Desert Skink, Tjakura, Warrarna, Mulyamiji, Tjalapa, Nampu [83160] | Vulnerable | Species or species habitat may occur within area | In buffer area only |
| Tiliqua scincoides intermedia<br>Northern Blue-tongued Skink [89838] | Critically Endangered | Species or species habitat likely to occur within area | In feature area |
| Varanus mertensi<br>Mertens' Water Monitor, Mertens's Water Monitor [1568] | Endangered | Species or species habitat may occur within area | In feature area |
| Varanus mitchelli<br>Mitchell's Water Monitor [1569] | Critically Endangered | Species or species habitat may occur within area | In feature area |
| SHARK | | | |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Pristis pristis<br>Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756] | Vulnerable | Species or species habitat known to occur within area | In feature area |

## Listed Migratory Species [ Resource Information ]

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| **Migratory Marine Birds** | | | |
| Apus pacificus<br>Fork-tailed Swift [678] | | Species or species habitat likely to occur within area | In feature area |
| **Migratory Marine Species** | | | |
| Crocodylus porosus<br>Salt-water Crocodile, Estuarine Crocodile [1774] | | Species or species habitat likely to occur within area | In feature area |
| Pristis pristis<br>Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756] | Vulnerable | Species or species habitat known to occur within area | In feature area |
| **Migratory Terrestrial Species** | | | |
| Cecropis daurica<br>Red-rumped Swallow [80610] | | Species or species habitat may occur within area | In feature area |
| Cuculus optatus<br>Oriental Cuckoo, Horsfield's Cuckoo [86651] | | Species or species habitat may occur within area | In feature area |
| Hirundo rustica<br>Barn Swallow [662] | | Species or species habitat may occur within area | In feature area |
| Motacilla cinerea<br>Grey Wagtail [642] | | Species or species habitat may occur within area | In feature area |
| Motacilla flava<br>Yellow Wagtail [644] | | Species or species habitat may occur within area | In feature area |
| **Migratory Wetlands Species** | | | |
| Actitis hypoleucos<br>Common Sandpiper [59309] | | Species or species habitat likely to occur within area | In feature area |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Calidris acuminata<br>Sharp-tailed Sandpiper [874] | Vulnerable | Species or species habitat likely to occur within area | In feature area |
| Calidris ferruginea<br>Curlew Sandpiper [856] | Critically Endangered | Species or species habitat likely to occur within area | In feature area |
| Calidris melanotos<br>Pectoral Sandpiper [858] | | Species or species habitat may occur within area | In feature area |
| Charadrius veredus<br>Oriental Plover, Oriental Dotterel [882] | | Species or species habitat may occur within area | In feature area |
| Glareola maldivarum<br>Oriental Pratincole [840] | | Species or species habitat may occur within area | In feature area |
| Pandion haliaetus<br>Osprey [952] | | Species or species habitat likely to occur within area | In buffer area only |
| Tringa nebularia<br>Common Greenshank, Greenshank [832] | Endangered | Species or species habitat likely to occur within area | In buffer area only |
| Tringa stagnatilis<br>Marsh Sandpiper, Little Greenshank [833] | | Species or species habitat likely to occur within area | In buffer area only |

## Other Matters Protected by the EPBC Act

| Listed Marine Species | | | [ Resource Information ] |
|---|---|---|---|
| Scientific Name | Threatened Category | Presence Text | Buffer Status |
| Bird | | | |
| Actitis hypoleucos<br>Common Sandpiper [59309] | | Species or species habitat likely to occur within area | In feature area |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| [Anseranas semipalmata](#)<br>Magpie Goose [978] | | Species or species habitat may occur within area overfly marine area | In feature area |
| [Apus pacificus](#)<br>Fork-tailed Swift [678] | | Species or species habitat likely to occur within area overfly marine area | In feature area |
| [Bubulcus ibis as Ardea ibis](#)<br>Cattle Egret [66521] | | Species or species habitat may occur within area overfly marine area | In feature area |
| [Calidris acuminata](#)<br>Sharp-tailed Sandpiper [874] | Vulnerable | Species or species habitat likely to occur within area | In feature area |
| [Calidris ferruginea](#)<br>Curlew Sandpiper [856] | Critically Endangered | Species or species habitat likely to occur within area overfly marine area | In feature area |
| [Calidris melanotos](#)<br>Pectoral Sandpiper [858] | | Species or species habitat may occur within area overfly marine area | In feature area |
| [Cecropis daurica as Hirundo daurica](#)<br>Red-rumped Swallow [80610] | | Species or species habitat may occur within area overfly marine area | In feature area |
| [Chalcites osculans as Chrysococcyx osculans](#)<br>Black-eared Cuckoo [83425] | | Species or species habitat known to occur within area overfly marine area | In feature area |
| [Charadrius veredus](#)<br>Oriental Plover, Oriental Dotterel [882] | | Species or species habitat may occur within area overfly marine area | In feature area |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| [Glareola maldivarum](#)<br>Oriental Pratincole [840] | | Species or species habitat may occur within area overfly marine area | In feature area |
| [Haliaeetus leucogaster](#)<br>White-bellied Sea-Eagle [943] | | Species or species habitat known to occur within area | In feature area |
| [Hirundo rustica](#)<br>Barn Swallow [662] | | Species or species habitat may occur within area overfly marine area | In feature area |
| [Merops ornatus](#)<br>Rainbow Bee-eater [670] | | Species or species habitat may occur within area overfly marine area | In feature area |
| [Motacilla cinerea](#)<br>Grey Wagtail [642] | | Species or species habitat may occur within area overfly marine area | In feature area |
| [Motacilla flava](#)<br>Yellow Wagtail [644] | | Species or species habitat may occur within area overfly marine area | In feature area |
| [Pandion haliaetus](#)<br>Osprey [952] | | Species or species habitat likely to occur within area | In buffer area only |
| [Rostratula australis as Rostratula benghalensis (sensu lato)](#)<br>Australian Painted Snipe [77037] | Endangered | Species or species habitat likely to occur within area overfly marine area | In feature area |
| [Tringa nebularia](#)<br>Common Greenshank, Greenshank [832] | Endangered | Species or species habitat likely to occur within area overfly marine area | In buffer area only |
| [Tringa stagnatilis](#)<br>Marsh Sandpiper, Little Greenshank [833] | | Species or species habitat likely to occur within area overfly marine area | In buffer area only |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Reptile | | | |
| Crocodylus johnstoni<br>Freshwater Crocodile, Johnston's Crocodile, Johnstone's Crocodile [1773] | | Species or species habitat may occur within area | In feature area |
| Crocodylus porosus<br>Salt-water Crocodile, Estuarine Crocodile [1774] | | Species or species habitat likely to occur within area | In feature area |

## Extra Information

| Nationally Important Wetlands | | [ Resource Information ] |
|---|---|---|
| Wetland Name | State | Buffer Status |
| Camballin Floodplain (Le Livre Swamp System) | WA | In buffer area only |

| EPBC Act Referrals | | | | [ Resource Information ] |
|---|---|---|---|---|
| Title of referral | Reference | Referral Outcome | Assessment Status | Buffer Status |
| Not controlled action | | | | |
| Clearing of approximately 2400 ha of Camballin Floodplain | 2008/4474 | Not Controlled Action | Completed | In buffer area only |

| Biologically Important Areas | | | |
|---|---|---|---|
| Scientific Name | Behaviour | Presence | Buffer Status |
| River shark | | | |
| Pristis pristis<br>Freshwater Sawfish [60756] | Foraging | Known to occur | In buffer area only |
| Pristis pristis<br>Freshwater Sawfish [60756] | Nursing | Known to occur | In buffer area only |

# Caveat

## 1 PURPOSE

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

The report contains the mapped locations of:

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

## 2 DISCLAIMER

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

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

## 3 DATA SOURCES

Threatened ecological communities

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

Threatened, migratory and marine species

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

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

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

## 4 LIMITATIONS

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

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

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

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

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

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

# Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

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

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

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

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# EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 23-Jan-2024

Summary
Details
- Matters of NES
- Other Matters Protected by the EPBC Act
- Extra Information

Caveat
Acknowledgements

# Summary

## Matters of National Environment Significance

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

| | |
|---|---|
| World Heritage Properties: | None |
| National Heritage Places: | 1 |
| Wetlands of International Importance (Ramsar | None |
| Great Barrier Reef Marine Park: | None |
| Commonwealth Marine Area: | None |
| Listed Threatened Ecological Communities: | None |
| Listed Threatened Species: | 42 |
| Listed Migratory Species: | 47 |

## Other Matters Protected by the EPBC Act

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

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

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

| | |
|---|---|
| Commonwealth Lands: | 29 |
| Commonwealth Heritage Places: | None |
| Listed Marine Species: | 79 |
| Whales and Other Cetaceans: | 11 |
| Critical Habitats: | None |
| Commonwealth Reserves Terrestrial: | None |
| Australian Marine Parks: | None |
| Habitat Critical to the Survival of Marine Turtles: | None |

## Extra Information

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

| | |
|---|---|
| State and Territory Reserves: | None |
| Regional Forest Agreements: | None |
| Nationally Important Wetlands: | None |
| EPBC Act Referrals: | 3 |
| Key Ecological Features (Marine): | None |
| Biologically Important Areas: | 14 |
| Bioregional Assessments: | None |
| Geological and Bioregional Assessments: | None |

# Details

## Matters of National Environmental Significance

### National Heritage Places [ Resource Information ]

| Name | State | Legal Status | Buffer Status |
|---|---|---|---|
| Natural | | | |
| The West Kimberley | WA | Listed place | In buffer area only |

### Listed Threatened Species [ Resource Information ]

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

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| BIRD | | | |
| Anous tenuirostris melanops | | | |
| Australian Lesser Noddy [26000] | Vulnerable | Species or species habitat may occur within area | In buffer area only |
| Calidris acuminata | | | |
| Sharp-tailed Sandpiper [874] | Vulnerable | Species or species habitat known to occur within area | In feature area |
| Calidris canutus | | | |
| Red Knot, Knot [855] | Vulnerable | Species or species habitat may occur within area | In feature area |
| Calidris ferruginea | | | |
| Curlew Sandpiper [856] | Critically Endangered | Species or species habitat known to occur within area | In feature area |
| Charadrius leschenaultii | | | |
| Greater Sand Plover, Large Sand Plover [877] | Vulnerable | Species or species habitat known to occur within area | In feature area |
| Erythrotriorchis radiatus | | | |
| Red Goshawk [942] | Endangered | Species or species habitat may occur within area | In feature area |
| Erythrura gouldiae | | | |
| Gouldian Finch [413] | Endangered | Species or species habitat may occur within area | In feature area |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Falco hypoleucos<br>Grey Falcon [929] | Vulnerable | Species or species habitat known to occur within area | In feature area |
| Limnodromus semipalmatus<br>Asian Dowitcher [843] | Vulnerable | Species or species habitat known to occur within area | In feature area |
| Limosa lapponica menzbieri<br>Northern Siberian Bar-tailed Godwit, Russkoye Bar-tailed Godwit [86432] | Endangered | Species or species habitat known to occur within area | In feature area |
| Numenius madagascariensis<br>Eastern Curlew, Far Eastern Curlew [847] | Critically Endangered | Species or species habitat known to occur within area | In feature area |
| Papasula abbotti<br>Abbott's Booby [59297] | Endangered | Species or species habitat may occur within area | In buffer area only |
| Pezoporus occidentalis<br>Night Parrot [59350] | Endangered | Species or species habitat may occur within area | In feature area |
| Phaethon rubricauda westralis<br>Red-tailed Tropicbird (Indian Ocean), Indian Ocean Red-tailed Tropicbird [91824] | Endangered | Species or species habitat likely to occur within area | In buffer area only |
| Polytelis alexandrae<br>Princess Parrot, Alexandra's Parrot [758] | Vulnerable | Species or species habitat may occur within area | In buffer area only |
| Rostratula australis<br>Australian Painted Snipe [77037] | Endangered | Species or species habitat likely to occur within area | In feature area |
| Tringa nebularia<br>Common Greenshank, Greenshank [832] | Endangered | Species or species habitat likely to occur within area | In feature area |
| Tyto novaehollandiae kimberli<br>Masked Owl (northern) [26048] | Vulnerable | Species or species habitat may occur within area | In buffer area only |
| FISH | | | |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Thunnus maccoyii<br>Southern Bluefin Tuna [69402] | Conservation Dependent | Species or species habitat likely to occur within area | In buffer area only |
| MAMMAL | | | |
| Dasyurus hallucatus<br>Northern Quoll, Digul [Gogo-Yimidir], Wijingadda [Dambimangari], Wiminji [Martu] [331] | Endangered | Species or species habitat likely to occur within area | In feature area |
| Macroderma gigas<br>Ghost Bat [174] | Vulnerable | Species or species habitat likely to occur within area | In feature area |
| Macrotis lagotis<br>Greater Bilby [282] | Vulnerable | Species or species habitat likely to occur within area | In feature area |
| Saccolaimus saccolaimus nudicluniatus<br>Bare-rumped Sheath-tailed Bat, Bare-rumped Sheathtail Bat [66889] | Vulnerable | Species or species habitat may occur within area | In buffer area only |
| Trichosurus vulpecula arnhemensis<br>Northern Brushtail Possum [83091] | Vulnerable | Species or species habitat may occur within area | In feature area |
| Xeromys myoides<br>Water Mouse, False Water Rat, Yirrkoo [66] | Vulnerable | Species or species habitat may occur within area | In buffer area only |
| REPTILE | | | |
| Aipysurus apraefrontalis<br>Short-nosed Sea Snake, Short-nosed Seasnake [1115] | Critically Endangered | Species or species habitat likely to occur within area | In buffer area only |
| Aipysurus foliosquama<br>Leaf-scaled Sea Snake, Leaf-scaled Seasnake [1118] | Critically Endangered | Species or species habitat may occur within area | In buffer area only |
| Caretta caretta<br>Loggerhead Turtle [1763] | Endangered | Breeding likely to occur within area | In buffer area only |
| Chelonia mydas<br>Green Turtle [1765] | Vulnerable | Breeding known to occur within area | In buffer area only |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Dermochelys coriacea<br>Leatherback Turtle, Leathery Turtle, Luth [1768] | Endangered | Breeding likely to occur within area | In buffer area only |
| Eretmochelys imbricata<br>Hawksbill Turtle [1766] | Vulnerable | Breeding likely to occur within area | In buffer area only |
| Natator depressus<br>Flatback Turtle [59257] | Vulnerable | Breeding known to occur within area | In buffer area only |
| Tiliqua scincoides intermedia<br>Northern Blue-tongued Skink [89838] | Critically Endangered | Species or species habitat known to occur within area | In feature area |
| Varanus mertensi<br>Mertens' Water Monitor, Mertens's Water Monitor [1568] | Endangered | Species or species habitat may occur within area | In feature area |
| Varanus mitchelli<br>Mitchell's Water Monitor [1569] | Critically Endangered | Species or species habitat may occur within area | In feature area |
| SHARK | | | |
| Carcharodon carcharias<br>White Shark, Great White Shark [64470] | Vulnerable | Species or species habitat may occur within area | In buffer area only |
| Glyphis garricki<br>Northern River Shark, New Guinea River Shark [82454] | Endangered | Breeding likely to occur within area | In buffer area only |
| Pristis clavata<br>Dwarf Sawfish, Queensland Sawfish [68447] | Vulnerable | Breeding known to occur within area | In buffer area only |
| Pristis pristis<br>Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756] | Vulnerable | Species or species habitat known to occur within area | In feature area |
| Pristis zijsron<br>Green Sawfish, Dindagubba, Narrowsnout Sawfish [68442] | Vulnerable | Breeding likely to occur within area | In buffer area only |
| Rhincodon typus<br>Whale Shark [66680] | Vulnerable | Species or species habitat may occur within area | In buffer area only |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Sphyrna lewini | | | |
| Scalloped Hammerhead [85267] | Conservation Dependent | Species or species habitat likely to occur within area | In buffer area only |

## Listed Migratory Species [ Resource Information ]

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| **Migratory Marine Birds** | | | |
| Anous stolidus | | | |
| Common Noddy [825] | | Species or species habitat may occur within area | In buffer area only |
| Apus pacificus | | | |
| Fork-tailed Swift [678] | | Species or species habitat likely to occur within area | In feature area |
| Calonectris leucomelas | | | |
| Streaked Shearwater [1077] | | Species or species habitat may occur within area | In buffer area only |
| Fregata ariel | | | |
| Lesser Frigatebird, Least Frigatebird [1012] | | Species or species habitat likely to occur within area | In buffer area only |
| Fregata minor | | | |
| Great Frigatebird, Greater Frigatebird [1013] | | Species or species habitat may occur within area | In buffer area only |
| Phaethon lepturus | | | |
| White-tailed Tropicbird [1014] | | Species or species habitat likely to occur within area | In buffer area only |
| Sternula albifrons | | | |
| Little Tern [82849] | | Species or species habitat may occur within area | In buffer area only |
| **Migratory Marine Species** | | | |
| Anoxypristis cuspidata | | | |
| Narrow Sawfish, Knifetooth Sawfish [68448] | | Species or species habitat likely to occur within area | In buffer area only |
| Balaenoptera edeni | | | |
| Bryde's Whale [35] | | Species or species habitat may occur within area | In buffer area only |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Carcharhinus longimanus<br>Oceanic Whitetip Shark [84108] | | Species or species habitat may occur within area | In buffer area only |
| Carcharodon carcharias<br>White Shark, Great White Shark [64470] | Vulnerable | Species or species habitat may occur within area | In buffer area only |
| Caretta caretta<br>Loggerhead Turtle [1763] | Endangered | Breeding likely to occur within area | In buffer area only |
| Chelonia mydas<br>Green Turtle [1765] | Vulnerable | Breeding known to occur within area | In buffer area only |
| Crocodylus porosus<br>Salt-water Crocodile, Estuarine Crocodile [1774] | | Species or species habitat likely to occur within area | In feature area |
| Dermochelys coriacea<br>Leatherback Turtle, Leathery Turtle, Luth [1768] | Endangered | Breeding likely to occur within area | In buffer area only |
| Dugong dugon<br>Dugong [28] | | Species or species habitat likely to occur within area | In buffer area only |
| Eretmochelys imbricata<br>Hawksbill Turtle [1766] | Vulnerable | Breeding likely to occur within area | In buffer area only |
| Megaptera novaeangliae<br>Humpback Whale [38] | | Species or species habitat known to occur within area | In buffer area only |
| Mobula alfredi as Manta alfredi<br>Reef Manta Ray, Coastal Manta Ray [90033] | | Species or species habitat may occur within area | In buffer area only |
| Mobula birostris as Manta birostris<br>Giant Manta Ray [90034] | | Species or species habitat may occur within area | In buffer area only |
| Natator depressus<br>Flatback Turtle [59257] | Vulnerable | Breeding known to occur within area | In buffer area only |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Orcaella heinsohni<br>Australian Snubfin Dolphin [81322] | | Breeding known to occur within area | In buffer area only |
| Orcinus orca<br>Killer Whale, Orca [46] | | Species or species habitat may occur within area | In buffer area only |
| Pristis clavata<br>Dwarf Sawfish, Queensland Sawfish [68447] | Vulnerable | Breeding known to occur within area | In buffer area only |
| Pristis pristis<br>Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756] | Vulnerable | Species or species habitat known to occur within area | In feature area |
| Pristis zijsron<br>Green Sawfish, Dindagubba, Narrowsnout Sawfish [68442] | Vulnerable | Breeding likely to occur within area | In buffer area only |
| Rhincodon typus<br>Whale Shark [66680] | Vulnerable | Species or species habitat may occur within area | In buffer area only |
| Sousa sahulensis as Sousa chinensis<br>Australian Humpback Dolphin [87942] | | Breeding known to occur within area | In buffer area only |
| Tursiops aduncus (Arafura/Timor Sea populations)<br>Spotted Bottlenose Dolphin (Arafura/Timor Sea populations) [78900] | | Species or species habitat likely to occur within area | In buffer area only |
| Migratory Terrestrial Species | | | |
| Cecropis daurica<br>Red-rumped Swallow [80610] | | Species or species habitat may occur within area | In feature area |
| Cuculus optatus<br>Oriental Cuckoo, Horsfield's Cuckoo [86651] | | Species or species habitat known to occur within area | In feature area |
| Hirundo rustica<br>Barn Swallow [662] | | Species or species habitat known to occur within area | In feature area |
| Motacilla cinerea<br>Grey Wagtail [642] | | Species or species habitat may occur within area | In feature area |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| [Motacilla flava](#)<br>Yellow Wagtail [644] | | Species or species habitat known to occur within area | In feature area |
| **Migratory Wetlands Species** | | | |
| [Actitis hypoleucos](#)<br>Common Sandpiper [59309] | | Species or species habitat known to occur within area | In feature area |
| [Calidris acuminata](#)<br>Sharp-tailed Sandpiper [874] | Vulnerable | Species or species habitat known to occur within area | In feature area |
| [Calidris canutus](#)<br>Red Knot, Knot [855] | Vulnerable | Species or species habitat may occur within area | In feature area |
| [Calidris ferruginea](#)<br>Curlew Sandpiper [856] | Critically Endangered | Species or species habitat known to occur within area | In feature area |
| [Calidris melanotos](#)<br>Pectoral Sandpiper [858] | | Species or species habitat known to occur within area | In feature area |
| [Charadrius leschenaultii](#)<br>Greater Sand Plover, Large Sand Plover [877] | Vulnerable | Species or species habitat known to occur within area | In feature area |
| [Charadrius veredus](#)<br>Oriental Plover, Oriental Dotterel [882] | | Species or species habitat may occur within area | In feature area |
| [Glareola maldivarum](#)<br>Oriental Pratincole [840] | | Species or species habitat may occur within area | In feature area |
| [Limnodromus semipalmatus](#)<br>Asian Dowitcher [843] | Vulnerable | Species or species habitat known to occur within area | In feature area |
| [Limosa lapponica](#)<br>Bar-tailed Godwit [844] | | Species or species habitat known to occur within area | In feature area |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Numenius madagascariensis | | | |
| Eastern Curlew, Far Eastern Curlew [847] | Critically Endangered | Species or species habitat known to occur within area | In feature area |
| Pandion haliaetus | | | |
| Osprey [952] | | Species or species habitat known to occur within area | In buffer area only |
| Tringa nebularia | | | |
| Common Greenshank, Greenshank [832] | Endangered | Species or species habitat likely to occur within area | In feature area |

## Other Matters Protected by the EPBC Act

### Commonwealth Lands [ Resource Information ]

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

| Commonwealth Land Name | State | Buffer Status |
|---|---|---|
| Defence | | |
| Defence - NORFORCE DEPOT - DERBY [50144] | WA | In buffer area only |
| Defence - RAAF BASE CURTIN [50113] | WA | In buffer area only |
| Unknown | | |
| Commonwealth Land - [51084] | WA | In buffer area only |
| Commonwealth Land - [51085] | WA | In buffer area only |
| Commonwealth Land - [51837] | WA | In buffer area only |
| Commonwealth Land - [51836] | WA | In buffer area only |
| Commonwealth Land - [51973] | WA | In buffer area only |
| Commonwealth Land - [51089] | WA | In buffer area only |
| Commonwealth Land - [51086] | WA | In buffer area only |
| Commonwealth Land - [51087] | WA | In buffer area only |
| Commonwealth Land - [51835] | WA | In buffer area only |
| Commonwealth Land - [51830] | WA | In buffer area only |
| Commonwealth Land - [51839] | WA | In buffer area only |
| Commonwealth Land - [51832] | WA | In buffer area only |

| Commonwealth Land Name | State | Buffer Status |
|---|---|---|
| Commonwealth Land - [51831] | WA | In buffer area only |
| Commonwealth Land - [51409] | WA | In buffer area only |
| Commonwealth Land - [51838] | WA | In buffer area only |
| Commonwealth Land - [51094] | WA | In buffer area only |
| Commonwealth Land - [51833] | WA | In buffer area only |
| Commonwealth Land - [51834] | WA | In buffer area only |
| Commonwealth Land - [51092] | WA | In buffer area only |
| Commonwealth Land - [50340] | WA | In buffer area only |
| Commonwealth Land - [50341] | WA | In buffer area only |
| Commonwealth Land - [51840] | WA | In buffer area only |
| Commonwealth Land - [52193] | WA | In buffer area only |
| Commonwealth Land - [52192] | WA | In buffer area only |
| Commonwealth Land - [52194] | WA | In buffer area only |
| Commonwealth Land - [51090] | WA | In buffer area only |
| Commonwealth Land - [51091] | WA | In buffer area only |

| Listed Marine Species | | | [ Resource Information ] |
|---|---|---|---|
| Scientific Name | Threatened Category | Presence Text | Buffer Status |
| Bird | | | |
| Actitis hypoleucos<br>Common Sandpiper [59309] | | Species or species habitat known to occur within area | In feature area |
| Anous stolidus<br>Common Noddy [825] | | Species or species habitat may occur within area | In buffer area only |
| Anous tenuirostris melanops<br>Australian Lesser Noddy [26000] | Vulnerable | Species or species habitat may occur within area | In buffer area only |
| Anseranas semipalmata<br>Magpie Goose [978] | | Species or species habitat may occur within area overfly marine area | In feature area |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| [Apus pacificus](#)<br>Fork-tailed Swift [678] | | Species or species habitat likely to occur within area overfly marine area | In feature area |
| [Bubulcus ibis as Ardea ibis](#)<br>Cattle Egret [66521] | | Species or species habitat may occur within area overfly marine area | In feature area |
| [Calidris acuminata](#)<br>Sharp-tailed Sandpiper [874] | Vulnerable | Species or species habitat known to occur within area | In feature area |
| [Calidris canutus](#)<br>Red Knot, Knot [855] | Vulnerable | Species or species habitat may occur within area overfly marine area | In feature area |
| [Calidris ferruginea](#)<br>Curlew Sandpiper [856] | Critically Endangered | Species or species habitat known to occur within area overfly marine area | In feature area |
| [Calidris melanotos](#)<br>Pectoral Sandpiper [858] | | Species or species habitat known to occur within area overfly marine area | In feature area |
| [Calonectris leucomelas](#)<br>Streaked Shearwater [1077] | | Species or species habitat may occur within area | In buffer area only |
| [Cecropis daurica as Hirundo daurica](#)<br>Red-rumped Swallow [80610] | | Species or species habitat may occur within area overfly marine area | In feature area |
| [Chalcites osculans as Chrysococcyx osculans](#)<br>Black-eared Cuckoo [83425] | | Species or species habitat known to occur within area overfly marine area | In feature area |
| [Charadrius leschenaultii](#)<br>Greater Sand Plover, Large Sand Plover [877] | Vulnerable | Species or species habitat known to occur within area | In feature area |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Charadrius veredus<br>Oriental Plover, Oriental Dotterel [882] | | Species or species habitat may occur within area overfly marine area | In feature area |
| Fregata ariel<br>Lesser Frigatebird, Least Frigatebird [1012] | | Species or species habitat likely to occur within area | In buffer area only |
| Fregata minor<br>Great Frigatebird, Greater Frigatebird [1013] | | Species or species habitat may occur within area | In buffer area only |
| Glareola maldivarum<br>Oriental Pratincole [840] | | Species or species habitat may occur within area overfly marine area | In feature area |
| Haliaeetus leucogaster<br>White-bellied Sea-Eagle [943] | | Species or species habitat known to occur within area | In feature area |
| Hirundo rustica<br>Barn Swallow [662] | | Species or species habitat known to occur within area overfly marine area | In feature area |
| Limnodromus semipalmatus<br>Asian Dowitcher [843] | Vulnerable | Species or species habitat known to occur within area overfly marine area | In feature area |
| Limosa lapponica<br>Bar-tailed Godwit [844] | | Species or species habitat known to occur within area | In feature area |
| Merops ornatus<br>Rainbow Bee-eater [670] | | Species or species habitat may occur within area overfly marine area | In feature area |
| Motacilla cinerea<br>Grey Wagtail [642] | | Species or species habitat may occur within area overfly marine area | In feature area |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| [Motacilla flava](#)<br>Yellow Wagtail [644] | | Species or species habitat known to occur within area overfly marine area | In feature area |
| [Numenius madagascariensis](#)<br>Eastern Curlew, Far Eastern Curlew [847] | Critically Endangered | Species or species habitat known to occur within area | In feature area |
| [Pandion haliaetus](#)<br>Osprey [952] | | Species or species habitat known to occur within area | In buffer area only |
| [Papasula abbotti](#)<br>Abbott's Booby [59297] | Endangered | Species or species habitat may occur within area | In buffer area only |
| [Phaethon lepturus](#)<br>White-tailed Tropicbird [1014] | | Species or species habitat likely to occur within area | In buffer area only |
| [Rostratula australis as Rostratula benghalensis (sensu lato)](#)<br>Australian Painted Snipe [77037] | Endangered | Species or species habitat likely to occur within area overfly marine area | In feature area |
| [Sternula albifrons as Sterna albifrons](#)<br>Little Tern [82849] | | Species or species habitat may occur within area | In buffer area only |
| [Tringa nebularia](#)<br>Common Greenshank, Greenshank [832] | Endangered | Species or species habitat likely to occur within area overfly marine area | In feature area |
| **Fish** | | | |
| [Campichthys tricarinatus](#)<br>Three-keel Pipefish [66192] | | Species or species habitat may occur within area | In buffer area only |
| [Choeroichthys brachysoma](#)<br>Pacific Short-bodied Pipefish, Short-bodied Pipefish [66194] | | Species or species habitat may occur within area | In buffer area only |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Choeroichthys suillus<br>Pig-snouted Pipefish [66198] | | Species or species habitat may occur within area | In buffer area only |
| Corythoichthys flavofasciatus<br>Reticulate Pipefish, Yellow-banded Pipefish, Network Pipefish [66200] | | Species or species habitat may occur within area | In buffer area only |
| Doryrhamphus excisus<br>Bluestripe Pipefish, Indian Blue-stripe Pipefish, Pacific Blue-stripe Pipefish [66211] | | Species or species habitat may occur within area | In buffer area only |
| Doryrhamphus janssi<br>Cleaner Pipefish, Janss' Pipefish [66212] | | Species or species habitat may occur within area | In buffer area only |
| Halicampus brocki<br>Brock's Pipefish [66219] | | Species or species habitat may occur within area | In buffer area only |
| Halicampus grayi<br>Mud Pipefish, Gray's Pipefish [66221] | | Species or species habitat may occur within area | In buffer area only |
| Halicampus nitidus<br>Glittering Pipefish [66224] | | Species or species habitat may occur within area | In buffer area only |
| Halicampus spinirostris<br>Spiny-snout Pipefish [66225] | | Species or species habitat may occur within area | In buffer area only |
| Haliichthys taeniophorus<br>Ribboned Pipehorse, Ribboned Seadragon [66226] | | Species or species habitat may occur within area | In buffer area only |
| Hippichthys penicillus<br>Beady Pipefish, Steep-nosed Pipefish [66231] | | Species or species habitat may occur within area | In buffer area only |
| Hippocampus histrix<br>Spiny Seahorse, Thorny Seahorse [66236] | | Species or species habitat may occur within area | In buffer area only |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Hippocampus kuda<br>Spotted Seahorse, Yellow Seahorse [66237] | | Species or species habitat may occur within area | In buffer area only |
| Hippocampus planifrons<br>Flat-face Seahorse [66238] | | Species or species habitat may occur within area | In buffer area only |
| Hippocampus spinosissimus<br>Hedgehog Seahorse [66239] | | Species or species habitat may occur within area | In buffer area only |
| Micrognathus micronotopterus<br>Tidepool Pipefish [66255] | | Species or species habitat may occur within area | In buffer area only |
| Solegnathus hardwickii<br>Pallid Pipehorse, Hardwick's Pipehorse [66272] | | Species or species habitat may occur within area | In buffer area only |
| Solegnathus lettiensis<br>Gunther's Pipehorse, Indonesian Pipefish [66273] | | Species or species habitat may occur within area | In buffer area only |
| Solenostomus cyanopterus<br>Robust Ghostpipefish, Blue-finned Ghost Pipefish, [66183] | | Species or species habitat may occur within area | In buffer area only |
| Syngnathoides biaculeatus<br>Double-end Pipehorse, Double-ended Pipehorse, Alligator Pipefish [66279] | | Species or species habitat may occur within area | In buffer area only |
| Trachyrhamphus bicoarctatus<br>Bentstick Pipefish, Bend Stick Pipefish, Short-tailed Pipefish [66280] | | Species or species habitat may occur within area | In buffer area only |
| Trachyrhamphus longirostris<br>Straightstick Pipefish, Long-nosed Pipefish, Straight Stick Pipefish [66281] | | Species or species habitat may occur within area | In buffer area only |
| Mammal | | | |
| Dugong dugon<br>Dugong [28] | | Species or species habitat likely to occur within area | In buffer area only |
| Reptile | | | |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Aipysurus apraefrontalis<br>Short-nosed Sea Snake, Short-nosed Seasnake [1115] | Critically Endangered | Species or species habitat likely to occur within area | In buffer area only |
| Aipysurus duboisii<br>Dubois' Sea Snake, Dubois' Seasnake, Reef Shallows Sea Snake [1116] | | Species or species habitat may occur within area | In buffer area only |
| Aipysurus foliosquama<br>Leaf-scaled Sea Snake, Leaf-scaled Seasnake [1118] | Critically Endangered | Species or species habitat may occur within area | In buffer area only |
| Aipysurus laevis<br>Olive Sea Snake, Olive-brown Sea Snake [1120] | | Species or species habitat may occur within area | In buffer area only |
| Aipysurus mosaicus as Aipysurus eydouxii<br>Mosaic Sea Snake [87261] | | Species or species habitat may occur within area | In buffer area only |
| Caretta caretta<br>Loggerhead Turtle [1763] | Endangered | Breeding likely to occur within area | In buffer area only |
| Chelonia mydas<br>Green Turtle [1765] | Vulnerable | Breeding known to occur within area | In buffer area only |
| Crocodylus johnstoni<br>Freshwater Crocodile, Johnston's Crocodile, Johnstone's Crocodile [1773] | | Species or species habitat may occur within area | In feature area |
| Crocodylus porosus<br>Salt-water Crocodile, Estuarine Crocodile [1774] | | Species or species habitat likely to occur within area | In feature area |
| Dermochelys coriacea<br>Leatherback Turtle, Leathery Turtle, Luth [1768] | Endangered | Breeding likely to occur within area | In buffer area only |
| Emydocephalus annulatus<br>Eastern Turtle-headed Sea Snake [1125] | | Species or species habitat may occur within area | In buffer area only |
| Eretmochelys imbricata<br>Hawksbill Turtle [1766] | Vulnerable | Breeding likely to occur within area | In buffer area only |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Hydrelaps darwiniensis<br>Port Darwin Sea Snake, Black-ringed Mangrove Sea Snake [1100] | | Species or species habitat may occur within area | In buffer area only |
| Hydrophis elegans<br>Elegant Sea Snake, Bar-bellied Sea Snake [1104] | | Species or species habitat may occur within area | In buffer area only |
| Hydrophis hardwickii as Lapemis hardwickii<br>Spine-bellied Sea Snake [93516] | | Species or species habitat may occur within area | In buffer area only |
| Hydrophis kingii as Disteira kingii<br>Spectacled Sea Snake [93511] | | Species or species habitat may occur within area | In buffer area only |
| Hydrophis macdowelli as Hydrophis mcdowelli<br>MacDowell's Sea Snake, Small-headed Sea Snake, [75601] | | Species or species habitat may occur within area | In buffer area only |
| Hydrophis major as Disteira major<br>Olive-headed Sea Snake [93512] | | Species or species habitat may occur within area | In buffer area only |
| Hydrophis ornatus<br>Spotted Sea Snake, Ornate Reef Sea Snake [1111] | | Species or species habitat may occur within area | In buffer area only |
| Hydrophis peronii as Acalyptophis peronii<br>Horned Sea Snake [93509] | | Species or species habitat may occur within area | In buffer area only |
| Hydrophis platurus as Pelamis platurus<br>Yellow-bellied Sea Snake [93517] | | Species or species habitat may occur within area | In buffer area only |
| Hydrophis stokesii as Astrotia stokesii<br>Stokes' Sea Snake [93510] | | Species or species habitat may occur within area | In buffer area only |
| Natator depressus<br>Flatback Turtle [59257] | Vulnerable | Breeding known to occur within area | In buffer area only |

| Whales and Other Cetaceans | | | [ Resource Information ] |
|---|---|---|---|
| Current Scientific Name | Status | Type of Presence | Buffer Status |
| Mammal | | | |

| Current Scientific Name | Status | Type of Presence | Buffer Status |
| --- | --- | --- | --- |
| Balaenoptera edeni<br>Bryde's Whale [35] | | Species or species habitat may occur within area | In buffer area only |
| Delphinus delphis<br>Common Dolphin, Short-beaked Common Dolphin [60] | | Species or species habitat may occur within area | In buffer area only |
| Grampus griseus<br>Risso's Dolphin, Grampus [64] | | Species or species habitat may occur within area | In buffer area only |
| Megaptera novaeangliae<br>Humpback Whale [38] | | Species or species habitat known to occur within area | In buffer area only |
| Orcaella heinsohni<br>Australian Snubfin Dolphin [81322] | | Breeding known to occur within area | In buffer area only |
| Orcinus orca<br>Killer Whale, Orca [46] | | Species or species habitat may occur within area | In buffer area only |
| Sousa sahulensis<br>Australian Humpback Dolphin [87942] | | Breeding known to occur within area | In buffer area only |
| Stenella attenuata<br>Spotted Dolphin, Pantropical Spotted Dolphin [51] | | Species or species habitat may occur within area | In buffer area only |
| Tursiops aduncus<br>Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418] | | Species or species habitat likely to occur within area | In buffer area only |
| Tursiops aduncus (Arafura/Timor Sea populations)<br>Spotted Bottlenose Dolphin (Arafura/Timor Sea populations) [78900] | | Species or species habitat likely to occur within area | In buffer area only |
| Tursiops truncatus s. str.<br>Bottlenose Dolphin [68417] | | Species or species habitat may occur within area | In buffer area only |

## Extra Information

### EPBC Act Referrals [ Resource Information ]

| Title of referral | Reference | Referral Outcome | Assessment Status | Buffer Status |
|---|---|---|---|---|
| Controlled action | | | | |
| Derby Tidal Power Project | 2010/5544 | Controlled Action | Final PER Or EIS | In feature area |
| Derby Tidal Power Proposal | 2001/398 | Controlled Action | Completed | In buffer area only |
| Duchess Paradise Project | 2011/6033 | Controlled Action | Completed | In buffer area only |

### Biologically Important Areas

| Scientific Name | Behaviour | Presence | Buffer Status |
|---|---|---|---|
| Dolphins | | | |
| Orcaella heinsohni<br>Australian Snubfin Dolphin [81322] | Breeding | Known to occur | In buffer area only |
| Orcaella heinsohni<br>Australian Snubfin Dolphin [81322] | Calving | Known to occur | In buffer area only |
| Orcaella heinsohni<br>Australian Snubfin Dolphin [81322] | Foraging (high density prey) | Known to occur | In buffer area only |
| Sousa chinensis<br>Indo-Pacific Humpback Dolphin [50] | Breeding | Known to occur | In buffer area only |
| Sousa chinensis<br>Indo-Pacific Humpback Dolphin [50] | Calving | Known to occur | In buffer area only |
| Sousa chinensis<br>Indo-Pacific Humpback Dolphin [50] | Foraging (high density prey) | Known to occur | In buffer area only |
| Tursiops aduncus<br>Indo-Pacific/Spotted Bottlenose Dolphin [68418] | Breeding | Known to occur | In buffer area only |
| Tursiops aduncus<br>Indo-Pacific/Spotted Bottlenose Dolphin [68418] | Calving | Known to occur | In buffer area only |

| Scientific Name | Behaviour | Presence | Buffer Status |
|---|---|---|---|
| Tursiops aduncus<br>Indo-Pacific/Spotted Bottlenose Dolphin [68418] | Foraging | Known to occur | In buffer area only |
| **River shark** | | | |
| Pristis clavata<br>Dwarf Sawfish [68447] | Juvenile | Known to occur | In feature area |
| Pristis clavata<br>Dwarf Sawfish [68447] | Nursing | Known to occur | In feature area |
| Pristis clavata<br>Dwarf Sawfish [68447] | Pupping | Known to occur | In feature area |
| Pristis pristis<br>Freshwater Sawfish [60756] | Foraging | Known to occur | In feature area |
| Pristis pristis<br>Freshwater Sawfish [60756] | Nursing | Known to occur | In feature area |

# Caveat

## 1 PURPOSE

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

The report contains the mapped locations of:

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

## 2 DISCLAIMER

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

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

## 3 DATA SOURCES

Threatened ecological communities

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

Threatened, migratory and marine species

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

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

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

## 4 LIMITATIONS

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

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

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

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

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

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

# Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

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

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

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

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# EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 24-Jan-2024


Summary

Details

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

Caveat

Acknowledgements

# Summary

## Matters of National Environment Significance

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

| | |
|---|---|
| World Heritage Properties: | None |
| National Heritage Places: | 1 |
| Wetlands of International Importance (Ramsar | 1 |
| Great Barrier Reef Marine Park: | None |
| Commonwealth Marine Area: | 1 |
| Listed Threatened Ecological Communities: | 1 |
| Listed Threatened Species: | 45 |
| Listed Migratory Species: | 67 |

## Other Matters Protected by the EPBC Act

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

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

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

| | |
|---|---|
| Commonwealth Lands: | 46 |
| Commonwealth Heritage Places: | None |
| Listed Marine Species: | 105 |
| Whales and Other Cetaceans: | 12 |
| Critical Habitats: | None |
| Commonwealth Reserves Terrestrial: | None |
| Australian Marine Parks: | 1 |
| Habitat Critical to the Survival of Marine Turtles: | 1 |

## Extra Information

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

| | |
|---|---|
| State and Territory Reserves: | 13 |
| Regional Forest Agreements: | None |
| Nationally Important Wetlands: | 2 |
| EPBC Act Referrals: | 16 |
| Key Ecological Features (Marine): | None |
| Biologically Important Areas: | 23 |
| Bioregional Assessments: | None |
| Geological and Bioregional Assessments: | None |

# Details

## Matters of National Environmental Significance

### National Heritage Places [ Resource Information ]

| Name | State | Legal Status | Buffer Status |
|---|---|---|---|
| Natural | | | |
| The West Kimberley | WA | Listed place | In buffer area only |

### Wetlands of International Importance (Ramsar Wetlands) [ Resource Information ]

| Ramsar Site Name | Proximity | Buffer Status |
|---|---|---|
| Roebuck bay | Within Ramsar site | In feature area |

### Commonwealth Marine Area [ Resource Information ]

Approval is required for a proposed activity that is located within the Commonwealth Marine Area which has, will have, or is likely to have a significant impact on the environment. Approval may be required for a proposed action taken outside a Commonwealth Marine Area but which has, may have or is likely to have a significant impact on the environment in the Commonwealth Marine Area.

| Feature Name | Buffer Status |
|---|---|
| Commonwealth Marine Areas (EPBC Act) | In buffer area only |

### Listed Threatened Ecological Communities [ Resource Information ]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.
Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

| Community Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Monsoon vine thickets on the coastal sand dunes of Dampier Peninsula | Endangered | Community likely to occur within area | In feature area |

### Listed Threatened Species [ Resource Information ]

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

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| BIRD | | | |
| Arenaria interpres | | | |
| Ruddy Turnstone [872] | Vulnerable | Roosting known to occur within area | In buffer area only |
| Calidris acuminata | | | |
| Sharp-tailed Sandpiper [874] | Vulnerable | Roosting known to occur within area | In feature area |
| Calidris canutus | | | |
| Red Knot, Knot [855] | Vulnerable | Species or species habitat known to occur within area | In feature area |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Calidris ferruginea<br>Curlew Sandpiper [856] | Critically Endangered | Species or species habitat known to occur within area | In feature area |
| Calidris tenuirostris<br>Great Knot [862] | Vulnerable | Roosting known to occur within area | In buffer area only |
| Charadrius leschenaultii<br>Greater Sand Plover, Large Sand Plover [877] | Vulnerable | Species or species habitat known to occur within area | In feature area |
| Charadrius mongolus<br>Lesser Sand Plover, Mongolian Plover [879] | Endangered | Roosting known to occur within area | In buffer area only |
| Erythrotriorchis radiatus<br>Red Goshawk [942] | Endangered | Species or species habitat may occur within area | In feature area |
| Erythrura gouldiae<br>Gouldian Finch [413] | Endangered | Species or species habitat may occur within area | In buffer area only |
| Falco hypoleucos<br>Grey Falcon [929] | Vulnerable | Species or species habitat known to occur within area | In feature area |
| Limnodromus semipalmatus<br>Asian Dowitcher [843] | Vulnerable | Species or species habitat known to occur within area | In feature area |
| Limosa lapponica menzbieri<br>Northern Siberian Bar-tailed Godwit, Russkoye Bar-tailed Godwit [86432] | Endangered | Species or species habitat known to occur within area | In buffer area only |
| Limosa limosa<br>Black-tailed Godwit [845] | Endangered | Roosting known to occur within area | In buffer area only |
| Numenius madagascariensis<br>Eastern Curlew, Far Eastern Curlew [847] | Critically Endangered | Species or species habitat known to occur within area | In feature area |
| Papasula abbotti<br>Abbott's Booby [59297] | Endangered | Species or species habitat may occur within area | In buffer area only |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| [Phaethon rubricauda westralis](#)<br>Red-tailed Tropicbird (Indian Ocean), Indian Ocean Red-tailed Tropicbird [91824] | Endangered | Species or species habitat likely to occur within area | In buffer area only |
| [Pluvialis squatarola](#)<br>Grey Plover [865] | Vulnerable | Roosting known to occur within area | In buffer area only |
| [Polytelis alexandrae](#)<br>Princess Parrot, Alexandra's Parrot [758] | Vulnerable | Species or species habitat may occur within area | In feature area |
| [Rostratula australis](#)<br>Australian Painted Snipe [77037] | Endangered | Species or species habitat known to occur within area | In feature area |
| [Tringa nebularia](#)<br>Common Greenshank, Greenshank [832] | Endangered | Species or species habitat known to occur within area | In feature area |
| [Tyto novaehollandiae kimberli](#)<br>Masked Owl (northern) [26048] | Vulnerable | Species or species habitat may occur within area | In feature area |
| [Xenus cinereus](#)<br>Terek Sandpiper [59300] | Vulnerable | Roosting known to occur within area | In buffer area only |
| FISH | | | |
| [Thunnus maccoyii](#)<br>Southern Bluefin Tuna [69402] | Conservation Dependent | Species or species habitat likely to occur within area | In buffer area only |
| MAMMAL | | | |
| [Balaenoptera musculus](#)<br>Blue Whale [36] | Endangered | Species or species habitat likely to occur within area | In buffer area only |
| [Macroderma gigas](#)<br>Ghost Bat [174] | Vulnerable | Species or species habitat may occur within area | In feature area |
| [Macrotis lagotis](#)<br>Greater Bilby [282] | Vulnerable | Species or species habitat known to occur within area | In feature area |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Saccolaimus saccolaimus nudicluniatus | | | |
| Bare-rumped Sheath-tailed Bat, Bare-rumped Sheathtail Bat [66889] | Vulnerable | Species or species habitat likely to occur within area | In feature area |
| Trichosurus vulpecula arnhemensis | | | |
| Northern Brushtail Possum [83091] | Vulnerable | Species or species habitat known to occur within area | In feature area |
| Xeromys myoides | | | |
| Water Mouse, False Water Rat, Yirrkoo [66] | Vulnerable | Species or species habitat may occur within area | In buffer area only |
| PLANT | | | |
| Seringia exastia | | | |
| Fringed Fire-bush [88920] | Critically Endangered | Species or species habitat known to occur within area | In buffer area only |
| REPTILE | | | |
| Aipysurus apraefrontalis | | | |
| Short-nosed Sea Snake, Short-nosed Seasnake [1115] | Critically Endangered | Species or species habitat likely to occur within area | In buffer area only |
| Aipysurus foliosquama | | | |
| Leaf-scaled Sea Snake, Leaf-scaled Seasnake [1118] | Critically Endangered | Species or species habitat may occur within area | In buffer area only |
| Caretta caretta | | | |
| Loggerhead Turtle [1763] | Endangered | Foraging, feeding or related behaviour known to occur within area | In buffer area only |
| Chelonia mydas | | | |
| Green Turtle [1765] | Vulnerable | Breeding known to occur within area | In buffer area only |
| Dermochelys coriacea | | | |
| Leatherback Turtle, Leathery Turtle, Luth [1768] | Endangered | Breeding likely to occur within area | In buffer area only |
| Eretmochelys imbricata | | | |
| Hawksbill Turtle [1766] | Vulnerable | Breeding likely to occur within area | In buffer area only |
| Natator depressus | | | |
| Flatback Turtle [59257] | Vulnerable | Breeding known to occur within area | In buffer area only |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Tiliqua scincoides intermedia | | | |
| Northern Blue-tongued Skink [89838] | Critically Endangered | Species or species habitat known to occur within area | In feature area |
| Varanus mertensi | | | |
| Mertens' Water Monitor, Mertens's Water Monitor [1568] | Endangered | Species or species habitat may occur within area | In feature area |
| SHARK | | | |
| Carcharodon carcharias | | | |
| White Shark, Great White Shark [64470] | Vulnerable | Species or species habitat may occur within area | In buffer area only |
| Pristis clavata | | | |
| Dwarf Sawfish, Queensland Sawfish [68447] | Vulnerable | Species or species habitat known to occur within area | In buffer area only |
| Pristis pristis | | | |
| Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756] | Vulnerable | Species or species habitat known to occur within area | In feature area |
| Pristis zijsron | | | |
| Green Sawfish, Dindagubba, Narrowsnout Sawfish [68442] | Vulnerable | Breeding known to occur within area | In buffer area only |
| Rhincodon typus | | | |
| Whale Shark [66680] | Vulnerable | Species or species habitat may occur within area | In buffer area only |
| Sphyrna lewini | | | |
| Scalloped Hammerhead [85267] | Conservation Dependent | Species or species habitat likely to occur within area | In buffer area only |

| Listed Migratory Species | | | [ Resource Information ] |
|---|---|---|---|
| Scientific Name | Threatened Category | Presence Text | Buffer Status |
| Migratory Marine Birds | | | |
| Anous stolidus | | | |
| Common Noddy [825] | | Species or species habitat likely to occur within area | In buffer area only |
| Apus pacificus | | | |
| Fork-tailed Swift [678] | | Species or species habitat likely to occur within area | In feature area |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Calonectris leucomelas<br>Streaked Shearwater [1077] | | Species or species habitat known to occur within area | In buffer area only |
| Fregata ariel<br>Lesser Frigatebird, Least Frigatebird [1012] | | Species or species habitat known to occur within area | In buffer area only |
| Fregata minor<br>Great Frigatebird, Greater Frigatebird [1013] | | Species or species habitat known to occur within area | In buffer area only |
| Phaethon lepturus<br>White-tailed Tropicbird [1014] | | Species or species habitat likely to occur within area | In buffer area only |
| Sternula albifrons<br>Little Tern [82849] | | Breeding known to occur within area | In buffer area only |
| **Migratory Marine Species** | | | |
| Anoxypristis cuspidata<br>Narrow Sawfish, Knifetooth Sawfish [68448] | | Species or species habitat likely to occur within area | In buffer area only |
| Balaenoptera edeni<br>Bryde's Whale [35] | | Species or species habitat may occur within area | In buffer area only |
| Balaenoptera musculus<br>Blue Whale [36] | Endangered | Species or species habitat likely to occur within area | In buffer area only |
| Carcharhinus longimanus<br>Oceanic Whitetip Shark [84108] | | Species or species habitat may occur within area | In buffer area only |
| Carcharodon carcharias<br>White Shark, Great White Shark [64470] | Vulnerable | Species or species habitat may occur within area | In buffer area only |
| Caretta caretta<br>Loggerhead Turtle [1763] | Endangered | Foraging, feeding or related behaviour known to occur within area | In buffer area only |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Chelonia mydas<br>Green Turtle [1765] | Vulnerable | Breeding known to occur within area | In buffer area only |
| Crocodylus porosus<br>Salt-water Crocodile, Estuarine Crocodile [1774] | | Species or species habitat likely to occur within area | In feature area |
| Dermochelys coriacea<br>Leatherback Turtle, Leathery Turtle, Luth [1768] | Endangered | Breeding likely to occur within area | In buffer area only |
| Dugong dugon<br>Dugong [28] | | Foraging, feeding or related behaviour known to occur within area | In buffer area only |
| Eretmochelys imbricata<br>Hawksbill Turtle [1766] | Vulnerable | Breeding likely to occur within area | In buffer area only |
| Megaptera novaeangliae<br>Humpback Whale [38] | | Breeding known to occur within area | In buffer area only |
| Mobula alfredi as Manta alfredi<br>Reef Manta Ray, Coastal Manta Ray [90033] | | Species or species habitat may occur within area | In buffer area only |
| Mobula birostris as Manta birostris<br>Giant Manta Ray [90034] | | Species or species habitat may occur within area | In buffer area only |
| Natator depressus<br>Flatback Turtle [59257] | Vulnerable | Breeding known to occur within area | In buffer area only |
| Orcaella heinsohni<br>Australian Snubfin Dolphin [81322] | | Breeding known to occur within area | In buffer area only |
| Orcinus orca<br>Killer Whale, Orca [46] | | Species or species habitat may occur within area | In buffer area only |
| Pristis clavata<br>Dwarf Sawfish, Queensland Sawfish [68447] | Vulnerable | Species or species habitat known to occur within area | In buffer area only |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| [Pristis pristis](#)<br>Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756] | Vulnerable | Species or species habitat known to occur within area | In feature area |
| [Pristis zijsron](#)<br>Green Sawfish, Dindagubba, Narrowsnout Sawfish [68442] | Vulnerable | Breeding known to occur within area | In buffer area only |
| [Rhincodon typus](#)<br>Whale Shark [66680] | Vulnerable | Species or species habitat may occur within area | In buffer area only |
| [Sousa sahulensis as Sousa chinensis](#)<br>Australian Humpback Dolphin [87942] | | Breeding known to occur within area | In buffer area only |
| [Tursiops aduncus (Arafura/Timor Sea populations)](#)<br>Spotted Bottlenose Dolphin (Arafura/Timor Sea populations) [78900] | | Species or species habitat known to occur within area | In buffer area only |
| **Migratory Terrestrial Species** | | | |
| [Cecropis daurica](#)<br>Red-rumped Swallow [80610] | | Species or species habitat known to occur within area | In feature area |
| [Cuculus optatus](#)<br>Oriental Cuckoo, Horsfield's Cuckoo [86651] | | Species or species habitat known to occur within area | In feature area |
| [Hirundo rustica](#)<br>Barn Swallow [662] | | Species or species habitat known to occur within area | In feature area |
| [Motacilla cinerea](#)<br>Grey Wagtail [642] | | Species or species habitat known to occur within area | In feature area |
| [Motacilla flava](#)<br>Yellow Wagtail [644] | | Species or species habitat known to occur within area | In feature area |
| **Migratory Wetlands Species** | | | |
| [Actitis hypoleucos](#)<br>Common Sandpiper [59309] | | Species or species habitat known to occur within area | In feature area |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| [Arenaria interpres](#)<br>Ruddy Turnstone [872] | Vulnerable | Roosting known to occur within area | In buffer area only |
| [Calidris acuminata](#)<br>Sharp-tailed Sandpiper [874] | Vulnerable | Roosting known to occur within area | In feature area |
| [Calidris alba](#)<br>Sanderling [875] | | Roosting known to occur within area | In buffer area only |
| [Calidris canutus](#)<br>Red Knot, Knot [855] | Vulnerable | Species or species habitat known to occur within area | In feature area |
| [Calidris ferruginea](#)<br>Curlew Sandpiper [856] | Critically Endangered | Species or species habitat known to occur within area | In feature area |
| [Calidris melanotos](#)<br>Pectoral Sandpiper [858] | | Species or species habitat known to occur within area | In feature area |
| [Calidris ruficollis](#)<br>Red-necked Stint [860] | | Roosting known to occur within area | In buffer area only |
| [Calidris tenuirostris](#)<br>Great Knot [862] | Vulnerable | Roosting known to occur within area | In buffer area only |
| [Charadrius bicinctus](#)<br>Double-banded Plover [895] | | Roosting known to occur within area | In buffer area only |
| [Charadrius leschenaultii](#)<br>Greater Sand Plover, Large Sand Plover [877] | Vulnerable | Species or species habitat known to occur within area | In feature area |
| [Charadrius mongolus](#)<br>Lesser Sand Plover, Mongolian Plover [879] | Endangered | Roosting known to occur within area | In buffer area only |
| [Charadrius veredus](#)<br>Oriental Plover, Oriental Dotterel [882] | | Roosting known to occur within area | In feature area |
| [Gallinago megala](#)<br>Swinhoe's Snipe [864] | | Roosting likely to occur within area | In buffer area only |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Gallinago stenura<br>Pin-tailed Snipe [841] | | Roosting likely to occur within area | In buffer area only |
| Glareola maldivarum<br>Oriental Pratincole [840] | | Roosting known to occur within area | In feature area |
| Limicola falcinellus<br>Broad-billed Sandpiper [842] | | Roosting known to occur within area | In buffer area only |
| Limnodromus semipalmatus<br>Asian Dowitcher [843] | Vulnerable | Species or species habitat known to occur within area | In feature area |
| Limosa lapponica<br>Bar-tailed Godwit [844] | | Species or species habitat known to occur within area | In buffer area only |
| Limosa limosa<br>Black-tailed Godwit [845] | Endangered | Roosting known to occur within area | In buffer area only |
| Numenius madagascariensis<br>Eastern Curlew, Far Eastern Curlew [847] | Critically Endangered | Species or species habitat known to occur within area | In feature area |
| Numenius minutus<br>Little Curlew, Little Whimbrel [848] | | Roosting known to occur within area | In buffer area only |
| Numenius phaeopus<br>Whimbrel [849] | | Roosting known to occur within area | In buffer area only |
| Pandion haliaetus<br>Osprey [952] | | Breeding known to occur within area | In buffer area only |
| Pluvialis fulva<br>Pacific Golden Plover [25545] | | Roosting known to occur within area | In buffer area only |
| Pluvialis squatarola<br>Grey Plover [865] | Vulnerable | Roosting known to occur within area | In buffer area only |
| Tringa brevipes<br>Grey-tailed Tattler [851] | | Roosting known to occur within area | In buffer area only |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| [Tringa glareola](#)<br>Wood Sandpiper [829] | | Roosting known to occur within area | In buffer area only |
| [Tringa nebularia](#)<br>Common Greenshank, Greenshank [832] | Endangered | Species or species habitat known to occur within area | In feature area |
| [Tringa stagnatilis](#)<br>Marsh Sandpiper, Little Greenshank [833] | | Roosting known to occur within area | In buffer area only |
| [Tringa totanus](#)<br>Common Redshank, Redshank [835] | | Roosting known to occur within area | In buffer area only |
| [Xenus cinereus](#)<br>Terek Sandpiper [59300] | Vulnerable | Roosting known to occur within area | In buffer area only |

## Other Matters Protected by the EPBC Act

### Commonwealth Lands [ Resource Information ]

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

| Commonwealth Land Name | State | Buffer Status |
|---|---|---|
| **Defence** | | |
| Defence - BROOME TRAINING DEPOT [50141] | WA | In buffer area only |
| **Unknown** | | |
| Commonwealth Land - [51814] | WA | In buffer area only |
| Commonwealth Land - [51815] | WA | In buffer area only |
| Commonwealth Land - [51818] | WA | In buffer area only |
| Commonwealth Land - [51819] | WA | In buffer area only |
| Commonwealth Land - [51070] | WA | In buffer area only |
| Commonwealth Land - [51080] | WA | In buffer area only |
| Commonwealth Land - [51081] | WA | In buffer area only |
| Commonwealth Land - [51068] | WA | In buffer area only |
| Commonwealth Land - [51083] | WA | In buffer area only |
| Commonwealth Land - [51072] | WA | In buffer area only |

| Commonwealth Land Name | State | Buffer Status |
|---|---|---|
| Commonwealth Land - [51082] | WA | In buffer area only |
| Commonwealth Land - [51812] | WA | In buffer area only |
| Commonwealth Land - [51965] | WA | In buffer area only |
| Commonwealth Land - [51069] | WA | In buffer area only |
| Commonwealth Land - [51816] | WA | In buffer area only |
| Commonwealth Land - [51811] | WA | In buffer area only |
| Commonwealth Land - [51810] | WA | In buffer area only |
| Commonwealth Land - [51813] | WA | In buffer area only |
| Commonwealth Land - [51817] | WA | In buffer area only |
| Commonwealth Land - [51809] | WA | In buffer area only |
| Commonwealth Land - [51808] | WA | In buffer area only |
| Commonwealth Land - [51078] | WA | In buffer area only |
| Commonwealth Land - [51079] | WA | In buffer area only |
| Commonwealth Land - [51071] | WA | In buffer area only |
| Commonwealth Land - [51966] | WA | In buffer area only |
| Commonwealth Land - [51075] | WA | In buffer area only |
| Commonwealth Land - [51074] | WA | In buffer area only |
| Commonwealth Land - [51077] | WA | In buffer area only |
| Commonwealth Land - [51076] | WA | In buffer area only |
| Commonwealth Land - [51820] | WA | In buffer area only |
| Commonwealth Land - [51826] | WA | In buffer area only |
| Commonwealth Land - [51821] | WA | In buffer area only |
| Commonwealth Land - [51803] | WA | In buffer area only |
| Commonwealth Land - [51806] | WA | In buffer area only |
| Commonwealth Land - [51807] | WA | In buffer area only |
| Commonwealth Land - [51804] | WA | In buffer area only |
| Commonwealth Land - [51805] | WA | In buffer area only |

| Commonwealth Land Name | State | Buffer Status |
|---|---|---|
| Commonwealth Land - [51824] | WA | In buffer area only |
| Commonwealth Land - [51825] | WA | In buffer area only |
| Commonwealth Land - [51073] | WA | In buffer area only |
| Commonwealth Land - [51088] | WA | In buffer area only |
| Commonwealth Land - [51067] | WA | In buffer area only |
| Commonwealth Land - [51823] | WA | In buffer area only |
| Commonwealth Land - [51822] | WA | In buffer area only |
| Commonwealth Land - [51431] | WA | In buffer area only |

## Listed Marine Species

[ Resource Information ]

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Bird | | | |
| Actitis hypoleucos<br>Common Sandpiper [59309] | | Species or species habitat known to occur within area | In feature area |
| Anous stolidus<br>Common Noddy [825] | | Species or species habitat likely to occur within area | In buffer area only |
| Anseranas semipalmata<br>Magpie Goose [978] | | Species or species habitat may occur within area overfly marine area | In feature area |
| Apus pacificus<br>Fork-tailed Swift [678] | | Species or species habitat likely to occur within area overfly marine area | In feature area |
| Arenaria interpres<br>Ruddy Turnstone [872] | Vulnerable | Roosting known to occur within area | In buffer area only |
| Bubulcus ibis as Ardea ibis<br>Cattle Egret [66521] | | Species or species habitat may occur within area overfly marine area | In feature area |
| Calidris acuminata<br>Sharp-tailed Sandpiper [874] | Vulnerable | Roosting known to occur within area | In feature area |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Calidris alba<br>Sanderling [875] | | Roosting known to occur within area | In buffer area only |
| Calidris canutus<br>Red Knot, Knot [855] | Vulnerable | Species or species habitat known to occur within area<br>overfly marine area | In feature area |
| Calidris ferruginea<br>Curlew Sandpiper [856] | Critically Endangered | Species or species habitat known to occur within area<br>overfly marine area | In feature area |
| Calidris melanotos<br>Pectoral Sandpiper [858] | | Species or species habitat known to occur within area<br>overfly marine area | In feature area |
| Calidris ruficollis<br>Red-necked Stint [860] | | Roosting known to occur within area<br>overfly marine area | In buffer area only |
| Calidris tenuirostris<br>Great Knot [862] | Vulnerable | Roosting known to occur within area<br>overfly marine area | In buffer area only |
| Calonectris leucomelas<br>Streaked Shearwater [1077] | | Species or species habitat known to occur within area | In buffer area only |
| Cecropis daurica as Hirundo daurica<br>Red-rumped Swallow [80610] | | Species or species habitat known to occur within area<br>overfly marine area | In feature area |
| Chalcites osculans as Chrysococcyx osculans<br>Black-eared Cuckoo [83425] | | Species or species habitat known to occur within area<br>overfly marine area | In feature area |
| Charadrius bicinctus<br>Double-banded Plover [895] | | Roosting known to occur within area<br>overfly marine area | In buffer area only |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Charadrius leschenaultii<br>Greater Sand Plover, Large Sand Plover [877] | Vulnerable | Species or species habitat known to occur within area | In feature area |
| Charadrius mongolus<br>Lesser Sand Plover, Mongolian Plover [879] | Endangered | Roosting known to occur within area | In buffer area only |
| Charadrius ruficapillus<br>Red-capped Plover [881] | | Roosting known to occur within area<br>overfly marine area | In buffer area only |
| Charadrius veredus<br>Oriental Plover, Oriental Dotterel [882] | | Roosting known to occur within area<br>overfly marine area | In feature area |
| Fregata ariel<br>Lesser Frigatebird, Least Frigatebird [1012] | | Species or species habitat known to occur within area | In buffer area only |
| Fregata minor<br>Great Frigatebird, Greater Frigatebird [1013] | | Species or species habitat known to occur within area | In buffer area only |
| Gallinago megala<br>Swinhoe's Snipe [864] | | Roosting likely to occur within area<br>overfly marine area | In buffer area only |
| Gallinago stenura<br>Pin-tailed Snipe [841] | | Roosting likely to occur within area<br>overfly marine area | In buffer area only |
| Glareola maldivarum<br>Oriental Pratincole [840] | | Roosting known to occur within area<br>overfly marine area | In feature area |
| Haliaeetus leucogaster<br>White-bellied Sea-Eagle [943] | | Species or species habitat known to occur within area | In feature area |
| Himantopus himantopus<br>Pied Stilt, Black-winged Stilt [870] | | Roosting known to occur within area<br>overfly marine area | In buffer area only |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Hirundo rustica<br>Barn Swallow [662] | | Species or species habitat known to occur within area overfly marine area | In feature area |
| Limicola falcinellus<br>Broad-billed Sandpiper [842] | | Roosting known to occur within area overfly marine area | In buffer area only |
| Limnodromus semipalmatus<br>Asian Dowitcher [843] | Vulnerable | Species or species habitat known to occur within area overfly marine area | In feature area |
| Limosa lapponica<br>Bar-tailed Godwit [844] | | Species or species habitat known to occur within area | In buffer area only |
| Limosa limosa<br>Black-tailed Godwit [845] | Endangered | Roosting known to occur within area overfly marine area | In buffer area only |
| Merops ornatus<br>Rainbow Bee-eater [670] | | Species or species habitat may occur within area overfly marine area | In feature area |
| Motacilla cinerea<br>Grey Wagtail [642] | | Species or species habitat known to occur within area overfly marine area | In feature area |
| Motacilla flava<br>Yellow Wagtail [644] | | Species or species habitat known to occur within area overfly marine area | In feature area |
| Numenius madagascariensis<br>Eastern Curlew, Far Eastern Curlew [847] | Critically Endangered | Species or species habitat known to occur within area | In feature area |
| Numenius minutus<br>Little Curlew, Little Whimbrel [848] | | Roosting known to occur within area overfly marine area | In buffer area only |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Numenius phaeopus<br>Whimbrel [849] | | Roosting known to occur within area | In buffer area only |
| Pandion haliaetus<br>Osprey [952] | | Breeding known to occur within area | In buffer area only |
| Papasula abbotti<br>Abbott's Booby [59297] | Endangered | Species or species habitat may occur within area | In buffer area only |
| Phaethon lepturus<br>White-tailed Tropicbird [1014] | | Species or species habitat likely to occur within area | In buffer area only |
| Pluvialis fulva<br>Pacific Golden Plover [25545] | | Roosting known to occur within area | In buffer area only |
| Pluvialis squatarola<br>Grey Plover [865] | Vulnerable | Roosting known to occur within area overfly marine area | In buffer area only |
| Recurvirostra novaehollandiae<br>Red-necked Avocet [871] | | Roosting known to occur within area overfly marine area | In buffer area only |
| Rostratula australis as Rostratula benghalensis (sensu lato)<br>Australian Painted Snipe [77037] | Endangered | Species or species habitat known to occur within area overfly marine area | In feature area |
| Sternula albifrons as Sterna albifrons<br>Little Tern [82849] | | Breeding known to occur within area | In buffer area only |
| Tringa brevipes as Heteroscelus brevipes<br>Grey-tailed Tattler [851] | | Roosting known to occur within area | In buffer area only |
| Tringa glareola<br>Wood Sandpiper [829] | | Roosting known to occur within area overfly marine area | In buffer area only |
| Tringa nebularia<br>Common Greenshank, Greenshank [832] | Endangered | Species or species habitat known to occur within area overfly marine area | In feature area |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| [Tringa stagnatilis](#)<br>Marsh Sandpiper, Little Greenshank [833] | | Roosting known to occur within area<br>overfly marine area | In buffer area only |
| [Tringa totanus](#)<br>Common Redshank, Redshank [835] | | Roosting known to occur within area<br>overfly marine area | In buffer area only |
| [Xenus cinereus](#)<br>Terek Sandpiper [59300] | Vulnerable | Roosting known to occur within area<br>overfly marine area | In buffer area only |
| **Fish** | | | |
| [Campichthys tricarinatus](#)<br>Three-keel Pipefish [66192] | | Species or species habitat may occur within area | In buffer area only |
| [Choeroichthys brachysoma](#)<br>Pacific Short-bodied Pipefish, Short-bodied Pipefish [66194] | | Species or species habitat may occur within area | In buffer area only |
| [Choeroichthys suillus](#)<br>Pig-snouted Pipefish [66198] | | Species or species habitat may occur within area | In buffer area only |
| [Corythoichthys flavofasciatus](#)<br>Reticulate Pipefish, Yellow-banded Pipefish, Network Pipefish [66200] | | Species or species habitat may occur within area | In buffer area only |
| [Cosmocampus banneri](#)<br>Roughridge Pipefish [66206] | | Species or species habitat may occur within area | In buffer area only |
| [Doryrhamphus excisus](#)<br>Bluestripe Pipefish, Indian Blue-stripe Pipefish, Pacific Blue-stripe Pipefish [66211] | | Species or species habitat may occur within area | In buffer area only |
| [Doryrhamphus janssi](#)<br>Cleaner Pipefish, Janss' Pipefish [66212] | | Species or species habitat may occur within area | In buffer area only |
| [Filicampus tigris](#)<br>Tiger Pipefish [66217] | | Species or species habitat may occur within area | In buffer area only |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Halicampus brocki<br>Brock's Pipefish [66219] | | Species or species habitat may occur within area | In buffer area only |
| Halicampus grayi<br>Mud Pipefish, Gray's Pipefish [66221] | | Species or species habitat may occur within area | In buffer area only |
| Halicampus nitidus<br>Glittering Pipefish [66224] | | Species or species habitat may occur within area | In buffer area only |
| Halicampus spinirostris<br>Spiny-snout Pipefish [66225] | | Species or species habitat may occur within area | In buffer area only |
| Haliichthys taeniophorus<br>Ribboned Pipehorse, Ribboned Seadragon [66226] | | Species or species habitat may occur within area | In buffer area only |
| Hippichthys penicillus<br>Beady Pipefish, Steep-nosed Pipefish [66231] | | Species or species habitat may occur within area | In buffer area only |
| Hippocampus histrix<br>Spiny Seahorse, Thorny Seahorse [66236] | | Species or species habitat may occur within area | In buffer area only |
| Hippocampus kuda<br>Spotted Seahorse, Yellow Seahorse [66237] | | Species or species habitat may occur within area | In buffer area only |
| Hippocampus planifrons<br>Flat-face Seahorse [66238] | | Species or species habitat may occur within area | In buffer area only |
| Hippocampus spinosissimus<br>Hedgehog Seahorse [66239] | | Species or species habitat may occur within area | In buffer area only |
| Hippocampus trimaculatus<br>Three-spot Seahorse, Low-crowned Seahorse, Flat-faced Seahorse [66720] | | Species or species habitat may occur within area | In buffer area only |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| [Micrognathus micronotopterus](#)<br>Tidepool Pipefish [66255] | | Species or species habitat may occur within area | In buffer area only |
| [Solegnathus hardwickii](#)<br>Pallid Pipehorse, Hardwick's Pipehorse [66272] | | Species or species habitat may occur within area | In buffer area only |
| [Solegnathus lettiensis](#)<br>Gunther's Pipehorse, Indonesian Pipefish [66273] | | Species or species habitat may occur within area | In buffer area only |
| [Solenostomus cyanopterus](#)<br>Robust Ghostpipefish, Blue-finned Ghost Pipefish, [66183] | | Species or species habitat may occur within area | In buffer area only |
| [Syngnathoides biaculeatus](#)<br>Double-end Pipehorse, Double-ended Pipehorse, Alligator Pipefish [66279] | | Species or species habitat may occur within area | In buffer area only |
| [Trachyrhamphus bicoarctatus](#)<br>Bentstick Pipefish, Bend Stick Pipefish, Short-tailed Pipefish [66280] | | Species or species habitat may occur within area | In buffer area only |
| [Trachyrhamphus longirostris](#)<br>Straightstick Pipefish, Long-nosed Pipefish, Straight Stick Pipefish [66281] | | Species or species habitat may occur within area | In buffer area only |
| **Mammal** | | | |
| [Dugong dugon](#)<br>Dugong [28] | | Foraging, feeding or related behaviour known to occur within area | In buffer area only |
| **Reptile** | | | |
| [Aipysurus apraefrontalis](#)<br>Short-nosed Sea Snake, Short-nosed Seasnake [1115] | Critically Endangered | Species or species habitat likely to occur within area | In buffer area only |
| [Aipysurus duboisii](#)<br>Dubois' Sea Snake, Dubois' Seasnake, Reef Shallows Sea Snake [1116] | | Species or species habitat may occur within area | In buffer area only |
| [Aipysurus foliosquama](#)<br>Leaf-scaled Sea Snake, Leaf-scaled Seasnake [1118] | Critically Endangered | Species or species habitat may occur within area | In buffer area only |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Aipysurus laevis<br>Olive Sea Snake, Olive-brown Sea Snake [1120] | | Species or species habitat may occur within area | In buffer area only |
| Aipysurus mosaicus as Aipysurus eydouxii<br>Mosaic Sea Snake [87261] | | Species or species habitat may occur within area | In buffer area only |
| Aipysurus tenuis<br>Brown-lined Sea Snake, Mjoberg's Sea Snake [1121] | | Species or species habitat may occur within area | In buffer area only |
| Caretta caretta<br>Loggerhead Turtle [1763] | Endangered | Foraging, feeding or related behaviour known to occur within area | In buffer area only |
| Chelonia mydas<br>Green Turtle [1765] | Vulnerable | Breeding known to occur within area | In buffer area only |
| Crocodylus johnstoni<br>Freshwater Crocodile, Johnston's Crocodile, Johnstone's Crocodile [1773] | | Species or species habitat may occur within area | In feature area |
| Crocodylus porosus<br>Salt-water Crocodile, Estuarine Crocodile [1774] | | Species or species habitat likely to occur within area | In feature area |
| Dermochelys coriacea<br>Leatherback Turtle, Leathery Turtle, Luth [1768] | Endangered | Breeding likely to occur within area | In buffer area only |
| Emydocephalus annulatus<br>Eastern Turtle-headed Sea Snake [1125] | | Species or species habitat may occur within area | In buffer area only |
| Ephalophis greyi<br>Mangrove Sea Snake [1127] | | Species or species habitat may occur within area | In buffer area only |
| Eretmochelys imbricata<br>Hawksbill Turtle [1766] | Vulnerable | Breeding likely to occur within area | In buffer area only |
| Hydrelaps darwiniensis<br>Port Darwin Sea Snake, Black-ringed Mangrove Sea Snake [1100] | | Species or species habitat may occur within area | In buffer area only |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Hydrophis elegans<br>Elegant Sea Snake, Bar-bellied Sea Snake [1104] | | Species or species habitat may occur within area | In buffer area only |
| Hydrophis hardwickii as Lapemis hardwickii<br>Spine-bellied Sea Snake [93516] | | Species or species habitat may occur within area | In buffer area only |
| Hydrophis kingii as Disteira kingii<br>Spectacled Sea Snake [93511] | | Species or species habitat may occur within area | In buffer area only |
| Hydrophis macdowelli as Hydrophis mcdowelli<br>MacDowell's Sea Snake, Small-headed Sea Snake, [75601] | | Species or species habitat may occur within area | In buffer area only |
| Hydrophis major as Disteira major<br>Olive-headed Sea Snake [93512] | | Species or species habitat may occur within area | In buffer area only |
| Hydrophis ornatus<br>Spotted Sea Snake, Ornate Reef Sea Snake [1111] | | Species or species habitat may occur within area | In buffer area only |
| Hydrophis peronii as Acalyptophis peronii<br>Horned Sea Snake [93509] | | Species or species habitat may occur within area | In buffer area only |
| Hydrophis platurus as Pelamis platurus<br>Yellow-bellied Sea Snake [93517] | | Species or species habitat may occur within area | In buffer area only |
| Hydrophis stokesii as Astrotia stokesii<br>Stokes' Sea Snake [93510] | | Species or species habitat may occur within area | In buffer area only |
| Natator depressus<br>Flatback Turtle [59257] | Vulnerable | Breeding known to occur within area | In buffer area only |

| Whales and Other Cetaceans | | | [ Resource Information ] |
|---|---|---|---|
| Current Scientific Name | Status | Type of Presence | Buffer Status |
| Mammal | | | |
| Balaenoptera edeni<br>Bryde's Whale [35] | | Species or species habitat may occur within area | In buffer area only |

| Current Scientific Name | Status | Type of Presence | Buffer Status |
|---|---|---|---|
| Balaenoptera musculus<br>Blue Whale [36] | Endangered | Species or species habitat likely to occur within area | In buffer area only |
| Delphinus delphis<br>Common Dolphin, Short-beaked Common Dolphin [60] | | Species or species habitat may occur within area | In buffer area only |
| Grampus griseus<br>Risso's Dolphin, Grampus [64] | | Species or species habitat may occur within area | In buffer area only |
| Megaptera novaeangliae<br>Humpback Whale [38] | | Breeding known to occur within area | In buffer area only |
| Orcaella heinsohni<br>Australian Snubfin Dolphin [81322] | | Breeding known to occur within area | In buffer area only |
| Orcinus orca<br>Killer Whale, Orca [46] | | Species or species habitat may occur within area | In buffer area only |
| Sousa sahulensis<br>Australian Humpback Dolphin [87942] | | Breeding known to occur within area | In buffer area only |
| Stenella attenuata<br>Spotted Dolphin, Pantropical Spotted Dolphin [51] | | Species or species habitat may occur within area | In buffer area only |
| Tursiops aduncus<br>Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418] | | Species or species habitat likely to occur within area | In buffer area only |
| Tursiops aduncus (Arafura/Timor Sea populations)<br>Spotted Bottlenose Dolphin (Arafura/Timor Sea populations) [78900] | | Species or species habitat known to occur within area | In buffer area only |
| Tursiops truncatus s. str.<br>Bottlenose Dolphin [68417] | | Species or species habitat may occur within area | In buffer area only |

| Australian Marine Parks | | [ Resource Information ] |
|---|---|---|
| Park Name | Zone & IUCN Categories | Buffer Status |

| Park Name | Zone & IUCN Categories | Buffer Status |
|---|---|---|
| Roebuck | Multiple Use Zone (IUCN VI) | In buffer area only |

## Habitat Critical to the Survival of Marine Turtles

| Scientific Name | Behaviour | Presence | Buffer Status |
|---|---|---|---|
| Aug - Sep | | | |
| Natator depressus | | | |
| Flatback Turtle [59257] | Nesting | Known to occur | In buffer area only |

# Extra Information

## State and Territory Reserves [ Resource Information ]

| Protected Area Name | Reserve Type | State | Buffer Status |
|---|---|---|---|
| Broome Bird Observatory | 5(1)(h) Reserve | WA | In buffer area only |
| Broome Wildlife Centre | 5(1)(h) Reserve | WA | In buffer area only |
| Unnamed WA51046 | 5(1)(h) Reserve | WA | In buffer area only |
| Unnamed WA51105 | 5(1)(h) Reserve | WA | In buffer area only |
| Unnamed WA51162 | 5(1)(h) Reserve | WA | In buffer area only |
| Unnamed WA51497 | 5(1)(h) Reserve | WA | In feature area |
| Unnamed WA51583 | 5(1)(h) Reserve | WA | In buffer area only |
| Unnamed WA51617 | 5(1)(h) Reserve | WA | In buffer area only |
| Unnamed WA51932 | 5(1)(h) Reserve | WA | In buffer area only |
| Unnamed WA52354 | 5(1)(h) Reserve | WA | In buffer area only |
| Yawuru | Indigenous Protected Area | WA | In feature area |
| Yawuru | Indigenous Protected Area | WA | In buffer area only |
| Yawuru Nagulagun / Roebuck Bay | Marine Park | WA | In buffer area only |

## Nationally Important Wetlands [ Resource Information ]

| Wetland Name | State | Buffer Status |
|---|---|---|
| Roebuck Bay | WA | In buffer area only |
| Willie Creek Wetlands | WA | In buffer area only |

## EPBC Act Referrals [ Resource Information ]

| Title of referral | Reference | Referral Outcome | Assessment Status | Buffer Status |
|---|---|---|---|---|

| Title of referral | Reference | Referral Outcome | Assessment Status | Buffer Status |
|---|---|---|---|---|
| | | | | |
| Broome Water Supply Borefield Bushfire Mitigation Program | 2023/09597 | | Referral Decision | In buffer area only |
| Ocean Barramundi Expansion Project | 2022/09272 | | Assessment | In buffer area only |
| Controlled action | | | | |
| Broome Boating Facility | 2021/9098 | Controlled Action | Referral Decision | In buffer area only |
| Broome International Airport Relocation Project | 2000/74 | Controlled Action | Post-Approval | In buffer area only |
| Derby Tidal Power Project | 2010/5544 | Controlled Action | Final PER Or EIS | In buffer area only |
| Not controlled action | | | | |
| Broome Borefield Bushfire Mitigation Program | 2020/8680 | Not Controlled Action | Completed | In buffer area only |
| Broome Motorplex Relocation Project, Lot 591 Broome Road | 2017/8117 | Not Controlled Action | Completed | In buffer area only |
| Broome Road Industrial Estate | 2020/8811 | Not Controlled Action | Completed | In buffer area only |
| Kimberley Marine Offloading Facility | 2020/8736 | Not Controlled Action | Completed | In buffer area only |
| Native Orchard Development, 10km northeast of Broome WA | 2019/8501 | Not Controlled Action | Completed | In buffer area only |
| Port of Broome Channel Optimisation Project, West Roebuck Bay, WA | 2018/8162 | Not Controlled Action | Completed | In buffer area only |
| Power Station Upgrade | 2001/357 | Not Controlled Action | Completed | In buffer area only |
| Power Station Upgrade (South Port Site) | 2001/414 | Not Controlled Action | Completed | In buffer area only |
| Wastewater Treatment Plant | 2008/4545 | Not Controlled Action | Completed | In buffer area only |
| Not controlled action (particular manner) | | | | |
| Construction of a 43km long sealed access road to the Browse LNG precinct | 2011/5852 | Not Controlled Action (Particular Manner) | Post-Approval | In buffer area only |
| Establishment of AQIS washdown facility, logistics support base and ancillary businesses | 2012/6364 | Not Controlled Action (Particular Manner) | Post-Approval | In buffer area only |

| Biologically Important Areas | | | |
|---|---|---|---|
| Scientific Name | Behaviour | Presence | Buffer Status |
| Dolphins | | | |
| Orcaella heinsohni<br>Australian Snubfin Dolphin [81322] | Breeding | Known to occur | In buffer area only |
| Orcaella heinsohni<br>Australian Snubfin Dolphin [81322] | Calving | Known to occur | In buffer area only |
| Orcaella heinsohni<br>Australian Snubfin Dolphin [81322] | Foraging (high density prey) | Known to occur | In buffer area only |
| Sousa chinensis<br>Indo-Pacific Humpback Dolphin [50] | Breeding | Known to occur | In buffer area only |
| Sousa chinensis<br>Indo-Pacific Humpback Dolphin [50] | Calving | Known to occur | In buffer area only |
| Sousa chinensis<br>Indo-Pacific Humpback Dolphin [50] | Foraging (high density prey) | Known to occur | In buffer area only |
| Tursiops aduncus<br>Indo-Pacific/Spotted Bottlenose Dolphin [68418] | Breeding | Known to occur | In buffer area only |
| Tursiops aduncus<br>Indo-Pacific/Spotted Bottlenose Dolphin [68418] | Calving | Known to occur | In buffer area only |
| Tursiops aduncus<br>Indo-Pacific/Spotted Bottlenose Dolphin [68418] | Foraging | Known to occur | In buffer area only |
| Dugong | | | |
| Dugong dugon<br>Dugong [28] | Foraging | Known to occur | In buffer area only |
| Dugong dugon<br>Dugong [28] | Foraging | Likely to occur | In buffer area only |
| Dugong dugon<br>Dugong [28] | Migration likely | Known to occur | In buffer area only |
| Marine Turtles | | | |
| Natator depressus<br>Flatback Turtle [59257] | Internesting buffer | Known to occur | In buffer area only |

| Scientific Name | Behaviour | Presence | Buffer Status |
|---|---|---|---|
| River shark | | | |
| Pristis pristis<br>Freshwater Sawfish [60756] | Foraging | Known to occur | In buffer area only |
| Pristis pristis<br>Freshwater Sawfish [60756] | Juvenile | Known to occur | In buffer area only |
| Pristis pristis<br>Freshwater Sawfish [60756] | Pupping | Known to occur | In buffer area only |
| Pristis zijsron<br>Green Sawfish [68442] | Foraging | Known to occur | In buffer area only |
| Pristis zijsron<br>Green Sawfish [68442] | Pupping | Known to occur | In buffer area only |
| Seabirds | | | |
| Fregata ariel<br>Lesser Frigatebird [1012] | Breeding | Known to occur | In buffer area only |
| Sternula albifrons sinensis<br>Little Tern [82850] | Breeding | Known to occur | In buffer area only |
| Sternula albifrons sinensis<br>Little Tern [82850] | Resting | Known to occur | In buffer area only |
| Whales | | | |
| Balaenoptera musculus brevicauda<br>Pygmy Blue Whale [81317] | Distribution | Known to occur | In buffer area only |
| Megaptera novaeangliae<br>Humpback Whale [38] | Migration (north and south) | Known to occur | In buffer area only |

# Caveat

## 1 PURPOSE

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

The report contains the mapped locations of:

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

## 2 DISCLAIMER

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

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

## 3 DATA SOURCES

Threatened ecological communities

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

Threatened, migratory and marine species

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

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

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

## 4 LIMITATIONS

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

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

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

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

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

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

# Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

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

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

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

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# EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 20-Mar-2024

Summary
Details
- Matters of NES
- Other Matters Protected by the EPBC Act
- Extra Information

Caveat
Acknowledgements

# Summary

## Matters of National Environment Significance

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

| | |
|---|---|
| World Heritage Properties: | None |
| National Heritage Places: | None |
| Wetlands of International Importance (Ramsar | 2 |
| Great Barrier Reef Marine Park: | None |
| Commonwealth Marine Area: | None |
| Listed Threatened Ecological Communities: | None |
| Listed Threatened Species: | 16 |
| Listed Migratory Species: | 11 |

## Other Matters Protected by the EPBC Act

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

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

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

| | |
|---|---|
| Commonwealth Lands: | 4 |
| Commonwealth Heritage Places: | None |
| Listed Marine Species: | 17 |
| Whales and Other Cetaceans: | None |
| Critical Habitats: | None |
| Commonwealth Reserves Terrestrial: | None |
| Australian Marine Parks: | None |
| Habitat Critical to the Survival of Marine Turtles: | None |

## Extra Information

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

| | |
|---|---|
| State and Territory Reserves: | None |
| Regional Forest Agreements: | None |
| Nationally Important Wetlands: | None |
| EPBC Act Referrals: | None |
| Key Ecological Features (Marine): | None |
| Biologically Important Areas: | None |
| Bioregional Assessments: | None |
| Geological and Bioregional Assessments: | None |

# Details

## Matters of National Environmental Significance

| Wetlands of International Importance (Ramsar Wetlands) | | [ Resource Information ] |
|---|---|---|
| Ramsar Site Name | Proximity | Buffer Status |
| Lakes argyle and kununurra | 150 - 200km upstream from Ramsar site | In feature area |
| Ord river floodplain | 200 - 300km upstream from Ramsar site | In feature area |

| Listed Threatened Species | | | [ Resource Information ] |
|---|---|---|---|
| Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.<br>Number is the current name ID. | | | |
| Scientific Name | Threatened Category | Presence Text | Buffer Status |
| BIRD | | | |
| Calidris acuminata<br>Sharp-tailed Sandpiper [874] | Vulnerable | Species or species habitat may occur within area | In feature area |
| Calidris ferruginea<br>Curlew Sandpiper [856] | Critically Endangered | Species or species habitat may occur within area | In feature area |
| Erythrotriorchis radiatus<br>Red Goshawk [942] | Endangered | Species or species habitat may occur within area | In feature area |
| Erythrura gouldiae<br>Gouldian Finch [413] | Endangered | Species or species habitat known to occur within area | In feature area |
| Falco hypoleucos<br>Grey Falcon [929] | Vulnerable | Species or species habitat likely to occur within area | In feature area |
| Pezoporus occidentalis<br>Night Parrot [59350] | Endangered | Species or species habitat may occur within area | In buffer area only |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| [Polytelis alexandrae](#)<br>Princess Parrot, Alexandra's Parrot [758] | Vulnerable | Species or species habitat may occur within area | In feature area |
| [Rostratula australis](#)<br>Australian Painted Snipe [77037] | Endangered | Species or species habitat may occur within area | In feature area |
| MAMMAL | | | |
| [Macroderma gigas](#)<br>Ghost Bat [174] | Vulnerable | Species or species habitat may occur within area | In feature area |
| [Macrotis lagotis](#)<br>Greater Bilby [282] | Vulnerable | Species or species habitat may occur within area | In feature area |
| [Trichosurus vulpecula arnhemensis](#)<br>Northern Brushtail Possum [83091] | Vulnerable | Species or species habitat may occur within area | In feature area |
| REPTILE | | | |
| [Liopholis kintorei](#)<br>Great Desert Skink, Tjakura, Warrarna, Mulyamiji, Tjalapa, Nampu [83160] | Vulnerable | Species or species habitat may occur within area | In buffer area only |
| [Tiliqua scincoides intermedia](#)<br>Northern Blue-tongued Skink [89838] | Critically Endangered | Species or species habitat known to occur within area | In feature area |
| [Varanus mertensi](#)<br>Mertens' Water Monitor, Mertens's Water Monitor [1568] | Endangered | Species or species habitat may occur within area | In feature area |
| [Varanus mitchelli](#)<br>Mitchell's Water Monitor [1569] | Critically Endangered | Species or species habitat may occur within area | In feature area |
| SHARK | | | |
| [Pristis pristis](#)<br>Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756] | Vulnerable | Species or species habitat may occur within area | In buffer area only |

| Listed Migratory Species | | | [ Resource Information ] |
|---|---|---|---|
| Scientific Name | Threatened Category | Presence Text | Buffer Status |
| Migratory Marine Birds | | | |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| [Apus pacificus](#)<br>Fork-tailed Swift [678] | | Species or species habitat likely to occur within area | In feature area |
| **Migratory Marine Species** | | | |
| [Pristis pristis](#)<br>Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756] | Vulnerable | Species or species habitat may occur within area | In buffer area only |
| **Migratory Terrestrial Species** | | | |
| [Hirundo rustica](#)<br>Barn Swallow [662] | | Species or species habitat may occur within area | In feature area |
| [Motacilla cinerea](#)<br>Grey Wagtail [642] | | Species or species habitat may occur within area | In feature area |
| [Motacilla flava](#)<br>Yellow Wagtail [644] | | Species or species habitat may occur within area | In feature area |
| **Migratory Wetlands Species** | | | |
| [Actitis hypoleucos](#)<br>Common Sandpiper [59309] | | Species or species habitat may occur within area | In feature area |
| [Calidris acuminata](#)<br>Sharp-tailed Sandpiper [874] | Vulnerable | Species or species habitat may occur within area | In feature area |
| [Calidris ferruginea](#)<br>Curlew Sandpiper [856] | Critically Endangered | Species or species habitat may occur within area | In feature area |
| [Calidris melanotos](#)<br>Pectoral Sandpiper [858] | | Species or species habitat may occur within area | In feature area |
| [Charadrius veredus](#)<br>Oriental Plover, Oriental Dotterel [882] | | Species or species habitat may occur within area | In feature area |
| [Glareola maldivarum](#)<br>Oriental Pratincole [840] | | Species or species habitat may occur within area | In feature area |

## Other Matters Protected by the EPBC Act

### Commonwealth Lands [ Resource Information ]

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

| Commonwealth Land Name | State | Buffer Status |
|---|---|---|
| Unknown | | |
| Commonwealth Land - [51841] | WA | In feature area |
| Commonwealth Land - [51842] | WA | In feature area |
| Commonwealth Land - [51843] | WA | In feature area |
| Commonwealth Land - [51967] | WA | In feature area |

### Listed Marine Species [ Resource Information ]

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| Bird | | | |
| Actitis hypoleucos | | | |
| Common Sandpiper [59309] | | Species or species habitat may occur within area | In feature area |
| Anseranas semipalmata | | | |
| Magpie Goose [978] | | Species or species habitat may occur within area overfly marine area | In buffer area only |
| Apus pacificus | | | |
| Fork-tailed Swift [678] | | Species or species habitat likely to occur within area overfly marine area | In feature area |
| Bubulcus ibis as Ardea ibis | | | |
| Cattle Egret [66521] | | Species or species habitat may occur within area overfly marine area | In feature area |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| [Calidris acuminata](#)<br>Sharp-tailed Sandpiper [874] | Vulnerable | Species or species habitat may occur within area | In feature area |
| [Calidris ferruginea](#)<br>Curlew Sandpiper [856] | Critically Endangered | Species or species habitat may occur within area overfly marine area | In feature area |
| [Calidris melanotos](#)<br>Pectoral Sandpiper [858] | | Species or species habitat may occur within area overfly marine area | In feature area |
| [Chalcites osculans as Chrysococcyx osculans](#)<br>Black-eared Cuckoo [83425] | | Species or species habitat may occur within area overfly marine area | In feature area |
| [Charadrius veredus](#)<br>Oriental Plover, Oriental Dotterel [882] | | Species or species habitat may occur within area overfly marine area | In feature area |
| [Glareola maldivarum](#)<br>Oriental Pratincole [840] | | Species or species habitat may occur within area overfly marine area | In feature area |
| [Haliaeetus leucogaster](#)<br>White-bellied Sea-Eagle [943] | | Species or species habitat may occur within area | In buffer area only |
| [Hirundo rustica](#)<br>Barn Swallow [662] | | Species or species habitat may occur within area overfly marine area | In feature area |
| [Merops ornatus](#)<br>Rainbow Bee-eater [670] | | Species or species habitat may occur within area overfly marine area | In feature area |
| [Motacilla cinerea](#)<br>Grey Wagtail [642] | | Species or species habitat may occur within area overfly marine area | In feature area |

| Scientific Name | Threatened Category | Presence Text | Buffer Status |
|---|---|---|---|
| [Motacilla flava](#)<br>Yellow Wagtail [644] | | Species or species habitat may occur within area overfly marine area | In feature area |
| [Rostratula australis as Rostratula benghalensis (sensu lato)](#)<br>Australian Painted Snipe [77037] | Endangered | Species or species habitat may occur within area overfly marine area | In feature area |
| **Reptile** | | | |
| [Crocodylus johnstoni](#)<br>Freshwater Crocodile, Johnston's Crocodile, Johnstone's Crocodile [1773] | | Species or species habitat may occur within area | In feature area |

## Extra Information

# Caveat

## 1 PURPOSE

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

The report contains the mapped locations of:

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

## 2 DISCLAIMER

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

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

## 3 DATA SOURCES

Threatened ecological communities

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

Threatened, migratory and marine species

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

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

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

## 4 LIMITATIONS

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

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

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

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

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

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

# Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

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

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

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

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# Appendix D

## Flora field data

Flora species list

Quadrat/Relevé data

Species by site data

Significant flora raw data

Flora likelihood of occurrence assessment

Additional local trees – Derby raw data

***Species list – all survey areas***

| Family | Species | Status | Halls Creek | Camballin / Looma | Derby | Broome |
|---|---|---|---|---|---|---|
| Acanthaceae | *Avicennia marina* subsp. *marina* | | | | | X |
| Acanthaceae | *Dicliptera armata* | | | X | | |
| Aizoaceae | *Sesuvium portulacastrum* subsp. *portulacastrum* | | | | | X |
| Aizoaceae | *Trianthema oxycalyptrum* var. *oxycalyptrum* | | X | | | |
| Aizoaceae | *Trianthema pilosum* | | | X | X | X |
| Aizoaceae | *Trianthema triquetrum* | | X | | | |
| Amaranthaceae | *Aerva javanica* | * | X | | | |
| Amaranthaceae | *Amaranthaceae* sp. (indet) | | | | | X |
| Amaranthaceae | *Gomphrena canescens* | | X | | | |
| Amaranthaceae | *Ptilotus calostachyus* | | X | X | | |
| Amaranthaceae | *Ptilotus exaltatus* | | X | | | X |
| Amaranthaceae | *Ptilotus fusiformis* | | X | | | |
| Amaranthaceae | *Ptilotus lanatus* | | | | X | |
| Amaranthaceae | *Ptilotus polystachyus* | | | | X | X |
| Amaranthaceae | *Ptilotus spicatus* | | X | | | |
| Apocynaceae | *?Leichhardtia viridiflora* subsp. *tropica* | | | | | X |
| Apocynaceae | *?Vincetoxicum carnosum* | | | | | X |
| Apocynaceae | *Alstonia linearis* | | | | X | X |
| Apocynaceae | *Calotropis gigantea* | * | | X | X | X |
| Apocynaceae | *Carissa lanceolata* | | | | X | X |
| Apocynaceae | *Cynanchum floribundum* | | | | X | |
| Apocynaceae | *Cynanchum viminale* subsp. *australe* | | | | X | |
| Apocynaceae | *Gymnema erectum* | | | | | X |
| Apocynaceae | *Wrightia saligna* | | | | | X |
| Asteraceae | *Bidens bipinnata* | * | | | X | |
| Asteraceae | *Minuria* sp. (indet) | | X | | | |
| Asteraceae | *Pluchea tetranthera* | | | | | X |
| Asteraceae | *Pterocaulon ?intermedium* | | | | | X |
| Asteraceae | *Pterocaulon* sp. (indet) | | | X | X | |
| Bignoniaceae | *Dolichandrone occidentalis* | | X | | | X |
| Bixaceae | *Cochlospermum fraseri* | | | | X | |
| Boraginaceae | *Ehretia saligna* | | X | | | |
| Boraginaceae | *Ehretia saligna* var. *saligna* | | | | X | X |
| Boraginaceae | *Euploca cunninghamii* | | X | | X | |
| Boraginaceae | *Euploca diversifolia* | | | | X | |
| Boraginaceae | *Euploca leptalea* | | | X | X | X |
| Boraginaceae | *Euploca ovalifolia* | | | | X | |
| Boraginaceae | *Euploca* sp. (indet) | | X | | | |



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| Family | Species | Status | Halls Creek | Camballin / Looma | Derby | Broome |
|---|---|---|---|---|---|---|
| Boraginaceae | *Trichodesma zeylanicum* | | X | | | |
| Boraginaceae | *Trichodesma zeylanicum* var. *latisepaleum* | | | X | X | X |
| Byblidaceae | *Byblis rorida* | | X | | | |
| Capparaceae | *Capparis lasiantha* | | X | | X | X |
| Capparaceae | *Capparis spinosa* subsp. *nummularia* | | | | X | |
| Capparaceae | *Capparis umbonata* | | X | | | |
| Caryophyllaceae | *Polycarpaea holtzei* | | X | | | |
| Caryophyllaceae | *Polycarpaea longiflora* | | X | | | |
| Celastraceae | *Denhamia cunninghamii* | | | | | X |
| Celastraceae | *Stackhousia intermedia* | | X | | | |
| Chenopodiaceae | *Maireana georgei* | | X | | | |
| Chenopodiaceae | *Neobassia astrocarpa* | | | | | X |
| Chenopodiaceae | *Salsola australis* | | X | | | |
| Chenopodiaceae | *Tecticornia ?pergranulata* subsp. *elongata* | | | | | X |
| Cleomaceae | *Arivela viscosa* | | X | X | X | |
| Combretaceae | *Terminalia ?platyphylla* | | | | X | |
| Combretaceae | *Terminalia canescens* | | | | X | |
| Combretaceae | *Terminalia kumpaja* | P3 | | | | X |
| Combretaceae | *Terminalia volucris* | | | | X | |
| Commelinaceae | *Commelina ensifolia* | | X | | | |
| Commelinaceae | *Murdannia graminea* | | X | | X | X |
| Convolvulaceae | *?Bonamia oblongifolia* | P3 | | | | X |
| Convolvulaceae | *?Convolvulaceae* (indet) | | | X | | |
| Convolvulaceae | *Bonamia linearis* | | | | | X |
| Convolvulaceae | *Bonamia oblongifolia* | P3 | | | | X |
| Convolvulaceae | *Bonamia pannosa* | | | | X | |
| Convolvulaceae | *Bonamia sp.* (indet) | | | | X | |
| Convolvulaceae | *Distimake dissectus* var. *dissectus* | * | | | X | X |
| Convolvulaceae | *Evolvulus alsinoides* var. *decumbens* | | X | | | X |
| Convolvulaceae | *Evolvulus alsinoides v*ar. *villosicalyx* | | X | | X | |
| Convolvulaceae | *Ipomoea nil* | * | X | | | |
| Convolvulaceae | *Ipomoea polymorpha* | | X | | | |
| Convolvulaceae | *Jacquemontia* ?sp. Broome (A.A. Mitchell 3028) | P1 | | | | X |
| Convolvulaceae | *Jacquemontia paniculata* | | | | | X |
| Convolvulaceae | *Jacquemontia* sp. Broome (A.A. Mitchell 3028) | P1 | | | | X |
| Convolvulaceae | *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | P3 | | X | | X |
| Convolvulaceae | *Polymeria* sp. Broome (K.F. Kenneally 9759) | P3 | | | | X |
| Cucurbitaceae | *Cucumis melo* | | X | | | |
| Cucurbitaceae | *Cucumis variabilis* | | | X | X | X |



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| Family | Species | Status | Halls Creek | Camballin / Looma | Derby | Broome |
|---|---|---|---|---|---|---|
| Cyperaceae | *Abildgaardia oxystachya* | | | | | X |
| Cyperaceae | *Bulbostylis barbata* | | | | X | |
| Cyperaceae | *Cyperus conicus* | | | | | X |
| Cyperaceae | *Cyperus pulchellus* | | X | | X | |
| Cyperaceae | *Cyperus squarrosus* | | X | | | |
| Cyperaceae | *Cyperus vaginatus* | | X | | | |
| Cyperaceae | *Fimbristylis ?dichotoma* | | | X | | |
| Cyperaceae | *Fimbristylis ?neilsonii* | | | | X | |
| Cyperaceae | *Fimbristylis ?rara* | | | | | X |
| Cyperaceae | *Fimbristylis dichotoma* | | X | | | |
| Cyperaceae | *Fimbristylis simulans* | | X | | | |
| Cyperaceae | *Fimbristylis* sp. (indet) | | | | X | |
| Cyperaceae | *Fimbristylis tetragona* | | | | X | |
| Droseraceae | *Drosera broomensis* | | | | | X |
| Droseraceae | *Drosera derbyensis* | | | | X | |
| Euphorbiaceae | *Euphorbia coghlanii* | | X | | X | |
| Euphorbiaceae | *Euphorbia psilosperma* | | | | | X |
| Euphorbiaceae | *Euphorbia schultzii* var. *schultzii* | | X | | | |
| Euphorbiaceae | *Euphorbia vaccaria* var. *vaccaria* | | | | | X |
| Euphorbiaceae | *Jatropha gossypifolia* | * DP WONS | | | X | |
| Euphorbiaceae | *Microstachys chamaelea* | | | | X | |
| Fabaceae | *Abrus precatorius* | | | | X | |
| Fabaceae | *Acacia ?eriopoda x tumida* var. *tumida* | | | | | X |
| Fabaceae | *Acacia ?stipuligera* | | | | | X |
| Fabaceae | *Acacia ?tumida* var. *tumida* | | | | | X |
| Fabaceae | *Acacia adoxa* | | X | | | |
| Fabaceae | *Acacia adoxa* var. *subglabra* | | | X | | X |
| Fabaceae | *Acacia ancistrocarpa* | | X | | | |
| Fabaceae | *Acacia colei* | | X | | | |
| Fabaceae | *Acacia colei* var. *colei* | | | | X | X |
| Fabaceae | *Acacia eriopoda* | | | | | X |
| Fabaceae | *Acacia eriopoda x tumida* var. *tumida* | | | | | X |
| Fabaceae | *Acacia latifolia* | | | | X | |
| Fabaceae | *Acacia monticola* | | | | X | |
| Fabaceae | *Acacia monticola x tumida* var. *kulparn* | P3 | | | | X |
| Fabaceae | *Acacia platycarpa* | | | | | X |
| Fabaceae | *Acacia plectocarpa* subsp. *plectocarpa* | | | | X | |
| Fabaceae | *Acacia ptychophylla* | | X | | | |
| Fabaceae | *Acacia retivenea* subsp. *retivenea* | | X | | | |



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| Family | Species | Status | Halls Creek | Camballin / Looma | Derby | Broome |
|---|---|---|---|---|---|---|
| Fabaceae | *Acacia tenuissima* | | X | | | |
| Fabaceae | *Acacia trachycarpa* | | X | | | |
| Fabaceae | *Acacia tumida* | | | X | | X |
| Fabaceae | *Acacia tumida* var. *?kulparn* | | | | | X |
| Fabaceae | *Acacia tumida* var. *kulparn* | | | | X | X |
| Fabaceae | *Alysicarpus muelleri* | | X | | | |
| Fabaceae | *Cajanus marmoratus* | | | | | X |
| Fabaceae | *Chamaecrista moorei* | | | | | X |
| Fabaceae | *Chamaecrista symonii* | | | | | X |
| Fabaceae | *Clitoria ternatea* | * | X | | X | |
| Fabaceae | *Crotalaria cunninghamii* subsp. *sturtii* | | X | | | |
| Fabaceae | *Crotalaria medicaginea* var. *neglecta* | | X | | | X |
| Fabaceae | *Crotalaria montana* var. *angustifolia* | | X | | | |
| Fabaceae | *Cullen martinii* | | X | | | X |
| Fabaceae | *Erythrophleum arenarium* | | | | | X |
| Fabaceae | *Erythrophleum chlorostachys* | | | | X | |
| Fabaceae | *Galactia tenuiflora* | | | | | X |
| Fabaceae | *Glycine pindanica* | | | | | X |
| Fabaceae | *Glycine tomentella* | | | | X | X |
| Fabaceae | *Grona filiformis* | | | X | X | X |
| Fabaceae | *Indigastrum parviflorum* | | X | | | |
| Fabaceae | *Indigofera colutea* | | X | | | X |
| Fabaceae | *Indigofera linifolia* | | X | | | X |
| Fabaceae | *Indigofera linnaei* | | X | | X | |
| Fabaceae | *Indigofera monophylla* | | X | | | |
| Fabaceae | *Leucaena leucocephala* | * | | | | X |
| Fabaceae | *Leucaena leucocephala* subsp. *leucocephala* | * | X | | | |
| Fabaceae | *Lysiphyllum cunninghamii* | | X | X | X | X |
| Fabaceae | *Neptunia ?major* | RE | | | | X |
| Fabaceae | *Neptunia scutata* | | X | | X | |
| Fabaceae | *Rhynchosia minima* | | X | | X | |
| Fabaceae | *Senna costata* | | | X | X | X |
| Fabaceae | *Senna notabilis* | | | | X | X |
| Fabaceae | *Senna oligoclada* | | X | | | |
| Fabaceae | *Senna venusta* | | | X | X | |
| Fabaceae | *Sesbania cannabina* | | X | | X | |
| Fabaceae | *Stylosanthes hamata* | * | X | | X | X |
| Fabaceae | *Stylosanthes scabra* | * | | | | X |
| Fabaceae | *Tephrosia brachyodon* var. *longifolia* | | | | X | |
| Fabaceae | *Tephrosia crocea* | | | | | X |



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| Family | Species | Status | Halls Creek | Camballin / Looma | Derby | Broome |
|---|---|---|---|---|---|---|
| Fabaceae | *Tephrosia crocea s. lat* | | | | | X |
| Fabaceae | *Tephrosia leptoclada* | | X | | | X |
| Fabaceae | *Tephrosia remotiflora* | | | | X | X |
| Fabaceae | *Tephrosia* sp. D Kimberley Flora (R.D. Royce 1848) | | | | X | X |
| Fabaceae | *Vigna lanceolata* | | | | X | |
| Fabaceae | *Vigna lanceolata* var. *lanceolata* | | X | | | |
| Fabaceae | *Zornia chaetophora* | | | X | X | X |
| Fabaceae | *Zornia muelleriana* subsp. *congesta* | | | X | | |
| Fabaceae | *Zornia muriculata* | | X | | | |
| Fabaceae | *Zornia prostrata* | | | | X | |
| Goodeniaceae | *Goodenia odonnellii* | | X | | | |
| Goodeniaceae | *Goodenia crenata* | P3 | X | | | |
| Goodeniaceae | *Goodenia heppleana* | | | | X | |
| Goodeniaceae | *Goodenia lamprosperma* | | | | X | X |
| Goodeniaceae | *Goodenia panduriformis* | | | | | X |
| Goodeniaceae | *Goodenia scaevolina* | | X | | | |
| Goodeniaceae | *Goodenia sepalosa* var. *sepalosa* | | | | | X |
| Goodeniaceae | *Goodenia* sp. (indet) | | X | | | |
| Goodeniaceae | *Goodenia* sp. Dampier Peninsula (B.J. Carter 675) | | | X | | |
| Goodeniaceae | *Scaevola parvifolia* subsp. *parvifolia* | | | | | X |
| Gyrostemonaceae | *Codonocarpus cotinifolius* | | | | | X |
| Haemodoraceae | *Haemodorum capitatum* | P1 / RE | | | X | |
| Hemerocallidaceae | *Corynotheca gracilis* | | | | | X |
| Hernandiaceae | *Gyrocarpus americanus* subsp. *americanus* | RE | | | X | X |
| Hernandiaceae | *Gyrocarpus americanus* subsp. *pachyphyllus* | | | | X | X |
| Hernandiaceae | *Gyrostemon tepperi* | | | | | X |
| Lamiaceae | *Clerodendrum floribundum* | | | | | X |
| Lamiaceae | *Clerodendrum floribundum* var. *ovatum* | | | | | X |
| Lamiaceae | *Clerodendrum tomentosum* var. *mollissima* | | | | | X |
| Lamiaceae | *Mesosphaerum suaveolens* | * | | | | X |
| Lamiaceae | *Ocimum basilicum* | * | | | X | X |
| Lamiaceae | *Premna acuminata* | | | X | X | X |
| Lauraceae | *Cassytha capillaris* | | | | | X |
| Lauraceae | *Cassytha filiformis* | | X | | X | |
| Lecythidaceae | *Planchonia careya* | | | | X | X |
| Linderniaceae | *Lindernia ?aplectra* | | | | | X |
| Loganiaceae | *Mitrasacme nudicaulis* var. *citrina* | | X | | | |



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| Family | Species | Status | Halls Creek | Camballin / Looma | Derby | Broome |
|---|---|---|---|---|---|---|
| Loganiaceae | *Mitrasacme retroloba* | | X | | | |
| Loranthaceae | *Lysiana spathulata* subsp. *spathulata* | | | | | X |
| Malvaceae | *?Brachychiton diversifolius* subsp. *diversifolius* | | | | | X |
| Malvaceae | *?Sida* sp. (indet) | | | | | X |
| Malvaceae | *Abutilon hannii* | | | | X | |
| Malvaceae | *Abutilon leucopetalum* | | | | X | |
| Malvaceae | *Abutilon otocarpum* | | | X | X | X |
| Malvaceae | *Abutilon* sp. (indet) | | | | X | X |
| Malvaceae | *Adansonia gregorii* | | X | X | X | |
| Malvaceae | *Brachychiton ?diversifolius* subsp. *diversifolius* | | | | | X |
| Malvaceae | *Brachychiton diversifolius* subsp. *diversifolius* | | | | X | X |
| Malvaceae | *Corchorus ?sidoides* subsp. *sidoides* | | | | | X |
| Malvaceae | *Corchorus aestuans* | | X | | | |
| Malvaceae | *Corchorus sidoides* subsp. *sidoides* | | | X | X | X |
| Malvaceae | *Corchorus tridens* | | X | | X | |
| Malvaceae | *Gossypium australe* | | X | X | X | X |
| Malvaceae | *Grewia pindanica* | | | | | X |
| Malvaceae | *Hibiscus apodus* | | | | | X |
| Malvaceae | *Hibiscus austrinus* | | | | X | |
| Malvaceae | *Hibiscus leptocladus* | | | | X | X |
| Malvaceae | *Hibiscus sturtii* | | X | | | |
| Malvaceae | *Melhania oblongifolia* | | X | X | X | |
| Malvaceae | *Sida fibulifera* | | X | | | |
| Malvaceae | *Sida rohlenae* subsp. *occidentalis* | | | | | X |
| Malvaceae | *Sida* sp. (indet) | | | | | X |
| Malvaceae | *Sida* sp. Excedentifolia (J.L Egan 1925) | | X | | | |
| Malvaceae | *Sida* sp. Pindan (B.G. Thomson 3398) | | | | | X |
| Malvaceae | *Triumfetta johnstonii* | | | | X | |
| Malvaceae | *Waltheria indica* | | X | | X | X |
| Meliaceae | *Azadirachta indica* | * DP | X | | X | X |
| Menispermaceae | *Tinospora smilacina* | | | X | X | X |
| Molluginaceae | *Trigastrotheca molluginea* | | X | | | |
| Montiaceae | *Calandrinia strophiolata* | | | | X | |
| Moraceae | *Ficus aculeata* var. *indecora* | | | | X | X |
| Moraceae | *Ficus tinctoria* | | | | X | |
| Myrtaceae | *?Calytrix* sp. (indet) | | | | X | |
| Myrtaceae | *Calytrix exstipulata* | | | | X | |
| Myrtaceae | *Corymbia ?confertiflora* | | | | | X |
| Myrtaceae | *Corymbia ?flavescens* | | | | | X |



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| Family | Species | Status | Halls Creek | Camballin / Looma | Derby | Broome |
|---|---|---|---|---|---|---|
| Myrtaceae | *Corymbia ?paractia* | P1 | | | | X |
| Myrtaceae | *Corymbia dendromerinx* | | | | | X |
| Myrtaceae | *Corymbia dichromophloia* | | | | X | |
| Myrtaceae | *Corymbia ferruginea* subsp. *stypophylla* | | X | | | |
| Myrtaceae | *Corymbia flavescens* | | | | | X |
| Myrtaceae | *Corymbia grandifolia* | | | | X | |
| Myrtaceae | *Corymbia greeniana* | | | | X | X |
| Myrtaceae | *Corymbia opaca* | | | | X | |
| Myrtaceae | *Corymbia polycarpa* | | | | X | X |
| Myrtaceae | *Corymbia* sp. (indet) | | | | X | X |
| Myrtaceae | *Corymbia zygophylla* | | | X | X | X |
| Myrtaceae | *Eucalyptus alba* var. *australasica* | | X | | | |
| Myrtaceae | *Eucalyptus miniata* | | | | X | |
| Myrtaceae | *Eucalyptus* sp. (indet) | | | | X | |
| Myrtaceae | *Eucalyptus tectifica* | | | | | X |
| Myrtaceae | *Eucalyptus victrix* | | X | | | |
| Myrtaceae | *Melaleuca ?glomerata* | RE | | | | X |
| Myrtaceae | *Melaleuca bracteata* | | X | | | |
| Myrtaceae | *Melaleuca cajuputi* subsp. *cajuputi* | | | | X | X |
| Myrtaceae | *Melaleuca nervosa* subsp. *nervosa* | | | | X | |
| Nyctaginaceae | *Boerhavia coccinea* | | | X | X | X |
| Nyctaginaceae | *Boerhavia paludosa* | | X | | | |
| Oleaceae | *Jasminum didymum* subsp. *lineare* | | | X | X | X |
| Oleaceae | *Jasminum molle* | | | | X | |
| Onagraceae | *Ludwigia perennis* | | X | | | |
| Orobanchaceae | *Buchnera ?ramosissima* | | | | | X |
| Orobanchaceae | *Buchnera* sp. (indet) | | | | | X |
| Orobanchaceae | *Striga squamigera* | | X | | | |
| Passifloraceae | *Passiflora foetida* var. *hispida* | * | X | | | X |
| Phyllanthaceae | *?Kirganelia baccata* | | | | | X |
| Phyllanthaceae | *Breynia cernua* | | | | | X |
| Phyllanthaceae | *Flueggea virosa* subsp. *melanthesoides* | | X | | X | X |
| Phyllanthaceae | *Kirganelia baccata* | | | | X | X |
| Phyllanthaceae | *Lysiandra ?arida* | | | X | X | |
| Phyllanthaceae | *Nellica maderaspatensis* | | X | | X | |
| Phyllanthaceae | *Synostemon lissocarpus* | | | | | X |
| Plantaginaceae | *Stemodia viscosa* | | X | | | |
| Poaceae | *?Aristida* sp. (indet) | | | | | X |
| Poaceae | *?Digitaria brownii* | | | | | X |
| Poaceae | *Aristida contorta* | | X | | | |



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| Family | Species | Status | Halls Creek | Camballin / Looma | Derby | Broome |
|---|---|---|---|---|---|---|
| Poaceae | *Aristida holathera* var. *holathera* | | X | | | X |
| Poaceae | *Aristida holathera* var. *latifolia* | | | | | X |
| Poaceae | *Aristida hygrometrica* | | | X | X | |
| Poaceae | *Aristida inaequiglumis* | | | | | X |
| Poaceae | *Aristida pruinosa* | | X | | | |
| Poaceae | *Aristida* sp. (indet) | | | | X | X |
| Poaceae | *Bothriochloa pertusa* | | X | | | |
| Poaceae | *Cenchrus biflorus* | * | | | | X |
| Poaceae | *Cenchrus ciliaris* | * | X | X | X | X |
| Poaceae | *Cenchrus setiger* | * | | | X | |
| Poaceae | *Cenchrus* sp. (indet) | * | | | | X |
| Poaceae | *Chrysopogon ?pallidus* | | | | | X |
| Poaceae | *Chrysopogon fallax* | | | | X | |
| Poaceae | *Chrysopogon pallidus* | | X | | | X |
| Poaceae | *Cymbopogon procerus* | | X | | | |
| Poaceae | *Cynodon ?dactylon* | * | | | | X |
| Poaceae | *Cynodon convergens* | | X | | | X |
| Poaceae | *Dactyloctenium radulans* | | | | | X |
| Poaceae | *Digitaria ciliaris* | * | | | | X |
| Poaceae | *Enneapogon polyphyllus* | | X | | | |
| Poaceae | *Enneapogon purpurascens* | | X | | | |
| Poaceae | *Eragrostis eriopoda* | | | | | X |
| Poaceae | *Eragrostis falcata* | | | | | X |
| Poaceae | *Eragrostis setifolia* | | | X | | |
| Poaceae | *Eragrostis* sp. (indet) | | | | | X |
| Poaceae | *Eragrostis speciosa* | | | | | X |
| Poaceae | *Eragrostis tenella* | * | X | | | |
| Poaceae | *Eragrostis tenellula* | | X | | | |
| Poaceae | *Eriachne ciliata* | | X | X | X | |
| Poaceae | *Eriachne melicacea* | | | X | | |
| Poaceae | *Eriachne mucronata* | | X | | | |
| Poaceae | *Eriachne obtusa* | | | | X | X |
| Poaceae | *Eulalia aurea* | | X | | | |
| Poaceae | *Heteropogon contortus* | | X | | X | |
| Poaceae | *Panicum decompositum* | | X | | | |
| Poaceae | *Panicum laevinode* | | | X | X | |
| Poaceae | *Panicum majusculum* | | | | X | |
| Poaceae | *Panicum trachyrhachis* | | | | X | |
| Poaceae | *Paspalidium rarum* | | X | | | X |
| Poaceae | *Perotis rara* | | X | X | | |



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| Family | Species | Status | Halls Creek | Camballin / Looma | Derby | Broome |
|---|---|---|---|---|---|---|
| Poaceae | *Poaceae* sp. (indet) | | | | X | X |
| Poaceae | *Schizachyrium fragile* | | X | | | |
| Poaceae | *Sorghum plumosum* | | X | | | X |
| Poaceae | *Sorghum* sp. (indet) | | | | | X |
| Poaceae | *Thaumastochloa major* | | X | | | |
| Poaceae | *Themeda triandra* | | X | | | |
| Poaceae | *Triodia ?caelestialis* | | | | | X |
| Poaceae | *Triodia caelestialis* | | | | X | X |
| Poaceae | *Triodia epactia* | | | | | X |
| Poaceae | *Triodia schinzii* | | | X | | |
| Poaceae | *Triodia wiseana* | | X | | | |
| Poaceae | *Urochloa holosericea* subsp. *velutina* | | X | | | |
| Poaceae | *Urochloa* sp. (indet) | | X | | | |
| Poaceae | *Urochloa trichopus* | * | | | X | X |
| Poaceae | *Xerochloa barbata* | | X | | | |
| Poaceae | *Xerochloa imberbis* | | | | | X |
| Polygalaceae | *Polygala galeocephala* | | X | | | |
| Polygalaceae | *Polygala longifolia* | | X | | | |
| Portulacaceae | *Portulaca bicolor* | | | | X | |
| Portulacaceae | *Portulaca oleracea* | | X | | | |
| Portulacaceae | *Portulaca* sp. (indet) | | X | X | X | |
| Proteaceae | *Grevillea pyramidalis* subsp. *pyramidalis* | | X | | X | X |
| Proteaceae | *Grevillea refracta* | | | X | | |
| Proteaceae | *Grevillea refracta* subsp. *refracta* | | | | | X |
| Proteaceae | *Grevillea wickhamii* subsp. *aprica* | | | X | | |
| Proteaceae | *Hakea arborescens* | | | | X | X |
| Proteaceae | *Hakea lorea* | | X | | | |
| Proteaceae | *Hakea macrocarpa* | | | | X | X |
| Proteaceae | *Hakea* sp. (indet) | | X | | | |
| Proteaceae | *Persoonia falcata* | | | | | X |
| Rhamnaceae | *Ventilago viminalis* | | | | | X |
| Rhizophoraceae | *?Ceriops australis* | | | | | X |
| Rubiaceae | *Dentella ?asperata* | | | | | X |
| Rubiaceae | *Gardenia pyriformis* subsp. *keartlandii* | | | | | X |
| Rubiaceae | *Pavetta kimberleyana* | | | | | X |
| Rubiaceae | *Spermacoce occidentalis* | | | | X | X |
| Rubiaceae | *Spermacoce* sp. Platysperma (J.R. Clarkson 6546) | | X | | | |
| Santalaceae | *Santalum lanceolatum* | | | | X | X |
| Sapindaceae | *Atalaya hemiglauca* | | | | X | |



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| Family | Species | Status | Halls Creek | Camballin / Looma | Derby | Broome |
|---|---|---|---|---|---|---|
| Sapindaceae | *Dodonaea hispidula* | | | | X | |
| Sapindaceae | *Dodonaea hispidula* var. *arida* | | | | | X |
| Sapotaceae | *Sersalisia sericea* | | | | | X |
| Scrophulariaceae | *Eremophila latrobei* subsp. *filiformis* | | X | | | |
| Scrophulariaceae | *Eremophila longifolia* | | X | | | |
| Solanaceae | *Solanum cunninghamii* | | | X | X | X |
| Solanaceae | *Solanum dioicum* | | | | | X |
| Solanaceae | *Solanum* sp. (indet) | | | | | X |
| Stylidiaceae | *Stylidium adenophorum* | | X | | | |
| Violaceae | *Afrohybanthus aurantiacus* | | X | X | | X |
| Violaceae | *Afrohybanthus enneaspermus* | | X | | | |
| Zygophyllaceae | *Tribulopis angustifolia* | | X | X | X | X |



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**Camballin/Looma flora species list**

| Family | Species | Status |
|---|---|---|
| Acanthaceae | *Dicliptera armata* | |
| Aizoaceae | *Trianthema pilosum* | |
| Amaranthaceae | *Ptilotus calostachyus* | |
| Apocynaceae | *Calotropis gigantea* | * |
| Asteraceae | *Pterocaulon* sp. (indet) | |
| Boraginaceae | *Euploca leptalea* | |
| Boraginaceae | *Trichodesma zeylanicum* var. *latisepaleum* | |
| Cleomaceae | *Arivela viscosa* | |
| Convolvulaceae | ?*Convolvulaceae* (indet) | |
| Convolvulaceae | *?Convolvulaceae (indet)* | |
| Convolvulaceae | *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | P3 |
| Cucurbitaceae | *Cucumis variabilis* | |
| Cyperaceae | *Fimbristylis* ?dichotoma | |
| Fabaceae | *Acacia tumida* | |
| Fabaceae | *Lysiphyllum cunninghamii* | |
| Fabaceae | *Senna costata* | |
| Fabaceae | *Zornia chaetophora* | |
| Fabaceae | *Grona filiformis* | |
| Fabaceae | *Senna venusta* | |
| Fabaceae | *Zornia muelleriana* subsp. *congesta* | |
| Fabaceae | *Acacia adoxa* var. *subglabra* | |
| Goodeniaceae | *Goodenia* sp. Dampier Peninsula (B.J. Carter 675) | |
| Lamiaceae | *Premna acuminata* | |
| Malvaceae | *Abutilon otocarpum* | |
| Malvaceae | *Corchorus sidoides* subsp. *sidoides* | |
| Malvaceae | *Gossypium australe* | |
| Malvaceae | *Melhania oblongifolia* | |
| Malvaceae | *Adansonia gregorii* | |
| Menispermaceae | *Tinospora smilacina* | |
| Myrtaceae | *Corymbia zygophylla* | |
| Nyctaginaceae | *Boerhavia coccinea* | |
| Oleaceae | *Jasminum didymum* subsp. *lineare* | |
| Phyllanthaceae | *Lysiandra* ?arida | |
| Poaceae | *Aristida hygrometrica* | |
| Poaceae | *Eragrostis setifolia* | |
| Poaceae | *Eriachne ciliata* | |
| Poaceae | *Eriachne melicacea* | |
| Poaceae | *Triodia schinzii* | |

| Family | Species | Status |
|---|---|---|
| Poaceae | *Panicum laevinode* | |
| Poaceae | *Cenchrus ciliaris* | * |
| Poaceae | *Perotis rara* | |
| Portulacaceae | *Portulaca* sp. (indet) | |
| Proteaceae | *Grevillea wickhamii* subsp. *aprica* | |
| Proteaceae | *Grevillea refracta* | |
| Solanaceae | *Solanum cunninghamii* | |
| Violaceae | *Afrohybanthus aurantiacus* | |
| Zygophyllaceae | *Tribulopis angustifolia* | |

**Broome flora species list**

| Family | Species | Status |
|---|---|---|
| Acanthaceae | *Avicennia marina* subsp. *marina* | RE |
| Aizoaceae | *Sesuvium portulacastrum* subsp. *portulacastrum* | |
| Aizoaceae | *Trianthema pilosum* | |
| Amaranthaceae | *Amaranthaceae* sp. | |
| Amaranthaceae | *Ptilotus exaltatus* | |
| Amaranthaceae | *Ptilotus polystachyus* | |
| Apocynaceae | *Alstonia linearis* | |
| Apocynaceae | *Calotropis gigantea* | * |
| Apocynaceae | *Carissa lanceolata* | |
| Apocynaceae | *Gymnema erectum* | |
| Apocynaceae | *?Leichhardtia viridiflora* subsp. *tropica* | |
| Apocynaceae | *?Vincetoxicum carnosum* | |
| Apocynaceae | *Wrightia saligna* | |
| Asteraceae | *Pluchea tetranthera* | |
| Asteraceae | *Pterocaulon ?intermedium* | |
| Bignoniaceae | *Dolichandrone occidentalis* | |
| Boraginaceae | *Euploca leptalea* | |
| Boraginaceae | *Ehretia saligna* var. *saligna* | |
| Boraginaceae | *Trichodesma zeylanicum* var. *latisepaleum* | |
| Capparaceae | *Capparis lasiantha* | |
| Celastraceae | *Denhamia cunninghamii* | |
| Chenopodiaceae | *Neobassia astrocarpa* | |
| Chenopodiaceae | *Tecticornia ?pergranulata* subsp. *elongata* | |
| Combretaceae | *Terminalia kumpaja* | P3 |
| Commelinaceae | *Murdannia graminea* | |
| Convolvulaceae | *Bonamia linearis* | |
| Convolvulaceae | *Distimake dissectus* var. *dissectus* | * |
| Convolvulaceae | *?Bonamia oblongifolia* | |

| Family | Species | Status |
|---|---|---|
| Convolvulaceae | *Bonamia oblongifolia* | |
| Convolvulaceae | *Evolvulus alsinoides* var. *decumbens* | |
| Convolvulaceae | *Jacquemontia paniculata* | |
| Convolvulaceae | *Jacquemontia* sp. Broome (A.A. Mitchell 3028) | P1 |
| Convolvulaceae | *Jacquemontia ?*sp. Broome (A.A. Mitchell 3028) | P1 |
| Convolvulaceae | *Polymeria* sp. Broome (K.F. Kenneally 9759) | P3 |
| Convolvulaceae | *Polymeria ?*sp. Broome (K.F. Kenneally 9759) | P3 |
| Cucurbitaceae | *Cucumis variabilis* | |
| Cyperaceae | *Abildgaardia oxystachya* | |
| Cyperaceae | *Cyperus conicus* | |
| Cyperaceae | *Fimbristylis ?rara* | |
| Droseraceae | *Drosera broomensis* | |
| Euphorbiaceae | *Euphorbia psilosperma* | |
| Euphorbiaceae | *Euphorbia vaccaria* var. *vaccaria* | |
| Fabaceae | *Acacia adoxa* var. *subglabra* | |
| Fabaceae | *Acacia colei* var. *colei* | |
| Fabaceae | *Acacia eriopoda* | |
| Fabaceae | *Acacia eriopoda x tumida* var. *tumida* | |
| Fabaceae | *Acacia ?eriopoda x tumida* var. *tumida* | |
| Fabaceae | *Acacia monticola x tumida* var. *kulparn* | P3 |
| Fabaceae | *Acacia platycarpa* | |
| Fabaceae | *Acacia ?stipuligera* | |
| Fabaceae | *Acacia tumida* var *?kulparn* | |
| Fabaceae | *Acacia ?tumida* var. *tumida* | |
| Fabaceae | *Acacia tumida* var. *?* | |
| Fabaceae | *Acacia tumida* var. *kulparn* | |
| Fabaceae | *Cajanus marmoratus* | |
| Fabaceae | *Chamaecrista moorei* | |
| Fabaceae | *Chamaecrista symonii* | |
| Fabaceae | *Crotalaria medicaginea* var. *neglecta* | |
| Fabaceae | *Cullen martinii* | |
| Fabaceae | *Erythrophleum arenarium* | |
| Fabaceae | *Leucaena leucocephala* | * |
| Fabaceae | *Galactia tenuiflora* | |
| Fabaceae | *Glycine pindanica* | |
| Fabaceae | *Glycine tomentella* | |
| Fabaceae | *Grona filiformis* | |
| Fabaceae | *Indigofera colutea* | |
| Fabaceae | *Indigofera linifolia* | |
| Fabaceae | *Lysiphyllum cunninghamii* | |
| Fabaceae | *Neptunia ?major* | RE |

| Family | Species | Status |
|---|---|---|
| Fabaceae | *Senna costata* | |
| Fabaceae | *Senna notabilis* | |
| Fabaceae | *Stylosanthes hamata* | * |
| Fabaceae | *Stylosanthes scabra* | * |
| Fabaceae | *Tephrosia crocea* | |
| Fabaceae | *Tephrosia crocea s. lat* | |
| Fabaceae | *Tephrosia leptoclada* | |
| Fabaceae | *Tephrosia remotiflora* | |
| Fabaceae | *Tephrosia* sp. D Kimberley Flora (R.D. Royce 1848) | |
| Fabaceae | *Zornia chaetophora* | |
| Goodeniaceae | *Goodenia lamprosperma* | |
| Goodeniaceae | *Goodenia panduriformis* | |
| Goodeniaceae | *Goodenia sepalosa* var. *sepalosa* | |
| Goodeniaceae | *Scaevola parvifolia* subsp. *parvifolia* | |
| Gyrostemonaceae | *Codonocarpus cotinifolius* | |
| Hemerocallidaceae | *Corynotheca gracilis* | |
| Hernandiaceae | *Gyrocarpus americanus* subsp. *americanus* | RE |
| Hernandiaceae | *Gyrocarpus americanus* subsp. *pachyphyllus* | |
| Hernandiaceae | *Gyrostemon tepperi* | |
| Lamiaceae | *Clerodendrum floribundum* ?var. | |
| Lamiaceae | *Clerodendrum floribundum* var. *ovatum* | |
| Lamiaceae | *Clerodendrum tomentosum* var. *mollissima* | |
| Lamiaceae | *Mesosphaerum suaveolens* | * |
| Lamiaceae | *Ocimum basilicum* | * |
| Lamiaceae | *Premna acuminata* | |
| Lauraceae | *Cassytha capillaris* | |
| Lecythidaceae | *Planchonia careya* | |
| Linderniaceae | *Lindernia ?aplectra* | |
| Loranthaceae | *Lysiana spathulata* subsp. *spathulata* | |
| Malvaceae | *Abutilon otocarpum* | |
| Malvaceae | *Abutilon sp.* | |
| Malvaceae | *Brachychiton ?diversifolius* subsp. *diversifolius* | |
| Malvaceae | *Brachychiton diversifolius* subsp. *diversifolius* | |
| Malvaceae | *?Brachychiton diversifolius* subsp. *diversifolius* | |
| Malvaceae | *Corchorus ?sidoides* | |
| Malvaceae | *Corchorus ?sidoides* subsp. *sidoides* | |
| Malvaceae | *Corchorus sidoides* | |
| Malvaceae | *Corchorus sidoides* subsp. *sidoides* | |
| Malvaceae | *Gossypium australe* | |
| Malvaceae | *Grewia pindanica* | |
| Malvaceae | *Hibiscus apodus* | |

| Family | Species | Status |
|---|---|---|
| Malvaceae | *Hibiscus leptocladus* | |
| Malvaceae | *Melhania oblongifolia* | |
| Malvaceae | *Sida rohlenae* subsp. *occidentalis* | |
| Malvaceae | *Sida* sp. | |
| Malvaceae | *?Sida* sp. | |
| Malvaceae | *Sida* sp. Pindan (B.G. Thomson 3398) | |
| Malvaceae | *Waltheria indica* | |
| Meliaceae | *Azadirachta indica* | DP * |
| Menispermaceae | *Tinospora smilacina* | |
| Moraceae | *Ficus aculeata* var. *indecora* | |
| Myrtaceae | *Corymbia ?confertiflora* | |
| Myrtaceae | *Corymbia ?flavescens* | |
| Myrtaceae | *Corymbia ?paractia* | P1 |
| Myrtaceae | *Corymbia dendromerinx* | |
| Myrtaceae | *Corymbia flavescens* | |
| Myrtaceae | *Corymbia greeniana* | |
| Myrtaceae | *Corymbia polycarpa* | |
| Myrtaceae | *Corymbia* sp. | |
| Myrtaceae | *Corymbia zygophylla* | |
| Myrtaceae | *Eucalyptus tectifica* | |
| Myrtaceae | *Melaleuca ?glomerata* | RE |
| Myrtaceae | *Melaleuca cajuputi* subsp. *cajuputi* | |
| Nyctaginaceae | *Boerhavia coccinea* | |
| Oleaceae | *Jasminum didymum* subsp. *lineare* | |
| Orobanchaceae | *Buchnera ?ramosissima* | |
| Orobanchaceae | *Buchnera* sp. | |
| Passifloraceae | *Passiflora foetida* var. *hispida* | * |
| Phyllanthaceae | *Breynia cernua* | |
| Phyllanthaceae | *Flueggea virosa* subsp. *melanthesoides* | |
| Phyllanthaceae | *Kirganelia baccata* | |
| Phyllanthaceae | *?Kirganelia baccata* | |
| Phyllanthaceae | *Synostemon lissocarpus* | |
| Poaceae | *Aristida holathera* var. *holathera* | |
| Poaceae | *Aristida holathera* var. *latifolia* | |
| Poaceae | *Aristida inaequiglumis* | |
| Poaceae | *Aristida* sp. | |
| Poaceae | *?Aristida* sp. | |
| Poaceae | *Cenchrus biflorus* | * |
| Poaceae | *Cenchrus ciliaris* | * |
| Poaceae | *Cenchrus* sp. | |
| Poaceae | *Chrysopogon ?pallidus* | |

| Family | Species | Status |
|---|---|---|
| Poaceae | *Chrysopogon pallidus* | |
| Poaceae | *Cynodon ?dactylon* | * |
| Poaceae | *Cynodon convergens* | |
| Poaceae | *Dactyloctenium radulans* | |
| Poaceae | *?Digitaria brownii* | |
| Poaceae | *Digitaria ciliaris* | * |
| Poaceae | *Eragrostis eriopoda* | |
| Poaceae | *Eragrostis falcata* | |
| Poaceae | *Eragrostis* sp. | |
| Poaceae | *Eragrostis speciosa* | |
| Poaceae | *Eriachne obtusa* | |
| Poaceae | *Paspalidium rarum* | |
| Poaceae | *Poaceae* sp. | |
| Poaceae | *Sorghum plumosum* | |
| Poaceae | *Sorghum* sp. | |
| Poaceae | *Triodia ?caelestialis* | |
| Poaceae | *Triodia caelestialis* | |
| Poaceae | *Triodia epactia* | |
| Poaceae | *Urochloa trichopus* | * |
| Poaceae | *Xerochloa imberbis* | |
| Proteaceae | *Grevillea pyramidalis* subsp. *pyramidalis* | |
| Proteaceae | *Grevillea refracta* subsp. *refracta* | |
| Proteaceae | *Hakea arborescens* | |
| Proteaceae | *Hakea macrocarpa* | |
| Proteaceae | *Persoonia falcata* | |
| Rhamnaceae | *Ventilago viminalis* | |
| Rhizophoraceae | *?Ceriops australis* | |
| Rubiaceae | *Dentella ?asperata* | |
| Rubiaceae | *Gardenia pyriformis* subsp. *keartlandii* | |
| Rubiaceae | *Pavetta kimberleyana* | |
| Rubiaceae | *Spermacoce occidentalis* | |
| Santalaceae | *Santalum lanceolatum* | |
| Sapindaceae | *Dodonaea hispidula* var. *arida* | |
| Sapotaceae | *Sersalisia sericea* | |
| Solanaceae | *Solanum cunninghamii* | |
| Solanaceae | *Solanum dioicum* | |
| Solanaceae | *Solanum* sp. | |
| Violaceae | *Afrohybanthus aurantiacus* | |
| Zygophyllaceae | *Tribulopis angustifolia* | |

**Derby species list**

| Family | Species | Status |
|---|---|---|
| Aizoaceae | *Trianthema pilosum* | |
| Amaranthaceae | *Ptilotus lanatus* | |
| Amaranthaceae | *Ptilotus polystachyus* | |
| Apocynaceae | *Alstonia linearis* | |
| Apocynaceae | *Calotropis gigantea* | * |
| Apocynaceae | *Carissa lanceolata* | |
| Apocynaceae | *Cynanchum floribundum* | |
| Apocynaceae | *Cynanchum viminale* subsp. *australe* | |
| Asteraceae | *Bidens bipinnata* | * |
| Asteraceae | *Pterocaulon* sp. (indet) | |
| Bixaceae | *Cochlospermum fraseri* | |
| Boraginaceae | *Ehretia saligna* var. *saligna* | |
| Boraginaceae | *Euploca cunninghamii* | |
| Boraginaceae | *Euploca diversifolia* | |
| Boraginaceae | *Euploca leptalea* | |
| Boraginaceae | *Euploca ovalifolia* | |
| Boraginaceae | *Trichodesma zeylanicum* var. *latisepaleum* | |
| Capparaceae | *Capparis lasiantha* | |
| Capparaceae | *Capparis spinosa* subsp. *nummularia* | |
| Cleomaceae | *Arivela viscosa* | |
| Combretaceae | *Terminalia ?platyphylla* | |
| Combretaceae | *Terminalia canescens* | |
| Combretaceae | *Terminalia volucris* | |
| Commelinaceae | *Murdannia graminea* | |
| Convolvulaceae | *Bonamia pannosa* | |
| Convolvulaceae | *Bonamia* sp. (indet) | |
| Convolvulaceae | *Distimake dissectus* var. *dissectus* | * |
| Convolvulaceae | *Evolvulus alsinoides* subsp. *villosicalyx* | |
| Cucurbitaceae | *Cucumis variabilis* | |
| Cyperaceae | *Bulbostylis barbata* | |
| Cyperaceae | *Cyperus pulchellus* | |
| Cyperaceae | *Fimbristylis ?neilsonii* | |
| Cyperaceae | *Fimbristylis* sp. (indet) | |
| Cyperaceae | *Fimbristylis tetragona* | |
| Droseraceae | *Drosera derbyensis* | |
| Euphorbiaceae | *Euphorbia coghlanii* | |
| Euphorbiaceae | *Jatropha gossypifolia* | DP/WONS* |
| Euphorbiaceae | *Microstachys chamaelea* | |

| Family | Species | Status |
|---|---|---|
| Fabaceae | *Abrus precatorius* | |
| Fabaceae | *Acacia colei* var. *colei* | |
| Fabaceae | *Acacia latifolia* | |
| Fabaceae | *Acacia monticola* | |
| Fabaceae | *Acacia plectocarpa* subsp. *plectocarpa* | |
| Fabaceae | *Acacia tumida* var. *kulparn* | |
| Fabaceae | *Clitoria ternatea* | * |
| Fabaceae | *Erythrophleum chlorostachys* | |
| Fabaceae | *Glycine tomentella* | |
| Fabaceae | *Grona filiformis* | |
| Fabaceae | *Indigofera linnaei* | |
| Fabaceae | *Lysiphyllum cunninghamii* | |
| Fabaceae | *Neptunia scutata* | |
| Fabaceae | *Rhynchosia minima* | |
| Fabaceae | *Senna costata* | |
| Fabaceae | *Senna notabilis* | |
| Fabaceae | *Senna venusta* | |
| Fabaceae | *Sesbania cannabina* | |
| Fabaceae | *Stylosanthes hamata* | * |
| Fabaceae | *Tephrosia brachyodon* var. *longifolia* | |
| Fabaceae | *Tephrosia remotiflora* | |
| Fabaceae | *Tephrosia* sp. D Kimberley Flora (R.D. Royce 1848) | |
| Fabaceae | *Vigna lanceolata* | |
| Fabaceae | *Zornia chaetophora* | |
| Fabaceae | *Zornia prostrata* | |
| Goodeniaceae | *Goodenia heppleana* | |
| Goodeniaceae | *Goodenia lamprosperma* | |
| Haemodoraceae | *Haemodorum capitatum* | P1 / RE |
| Hernandiaceae | *Gyrocarpus americanus* subsp. *americanus* | RE |
| Hernandiaceae | *Gyrocarpus americanus* subsp. *pachyphyllus* | |
| Lamiaceae | *Ocimum basilicum* | * |
| Lamiaceae | *Premna acuminata* | |
| Lauraceae | *Cassytha filiformis* | |
| Lecythidaceae | *Planchonia careya* | |
| Malvaceae | *Abutilon hannii* | |
| Malvaceae | *Abutilon leucopetalum* | |
| Malvaceae | *Abutilon otocarpum* | |
| Malvaceae | *Abutilon* sp. (indet) | |
| Malvaceae | *Adansonia gregorii* | |
| Malvaceae | *Brachychiton diversifolius* subsp. *diversifolius* | |
| Malvaceae | *Corchorus sidoides* subsp. *sidoides* | |

| Family | Species | Status |
|---|---|---|
| Malvaceae | *Corchorus tridens* | |
| Malvaceae | *Gossypium australe* | |
| Malvaceae | *Hibiscus austrinus* | |
| Malvaceae | *Hibiscus leptocladus* | |
| Malvaceae | *Melhania oblongifolia* | |
| Malvaceae | *Triumfetta johnstonii* | |
| Malvaceae | *Waltheria indica* | |
| Meliaceae | *Azadirachta indica* | DP * |
| Menispermaceae | *Tinospora smilacina* | |
| Montiaceae | *Calandrinia strophiolata* | |
| Moraceae | *Ficus aculeata var. indecora* | |
| Moraceae | *Ficus tinctoria* | |
| Myrtaceae | *?Calytrix* sp. (indet) | |
| Myrtaceae | *Calytrix exstipulata* | |
| Myrtaceae | *Corymbia dichromophloia* | |
| Myrtaceae | *Corymbia grandifolia* | |
| Myrtaceae | *Corymbia greeniana* | |
| Myrtaceae | *Corymbia opaca* | |
| Myrtaceae | *Corymbia polycarpa* | |
| Myrtaceae | *Corymbia* sp. (indet) | |
| Myrtaceae | *Corymbia zygophylla* | |
| Myrtaceae | *Eucalyptus miniata* | |
| Myrtaceae | *Eucalyptus* sp. (indet) | |
| Myrtaceae | *Melaleuca cajuputi* subsp. *cajuputi* | |
| Myrtaceae | *Melaleuca nervosa* subsp. *nervosa* | |
| Nyctaginaceae | *Boerhavia coccinea* | |
| Oleaceae | *Jasminum didymum* subsp. *lineare* | |
| Oleaceae | *Jasminum molle* | |
| Phyllanthaceae | *Flueggea virosa* subsp. *melanthesoides* | |
| Phyllanthaceae | *Kirganelia baccata* | |
| Phyllanthaceae | *Lysiandra ?arida* | |
| Phyllanthaceae | *Nellica maderaspatensis* | |
| Poaceae | *Aristida hygrometrica* | |
| Poaceae | *Aristida* sp. (indet) | |
| Poaceae | *Cenchrus ciliaris* | * |
| Poaceae | *Cenchrus setiger* | * |
| Poaceae | *Chrysopogon fallax* | |
| Poaceae | *Eriachne ciliata* | |
| Poaceae | *Eriachne obtusa* | |
| Poaceae | *Heteropogon contortus* | |
| Poaceae | *Panicum laevinode* | |

| Family | Species | Status |
|---|---|---|
| Poaceae | *Panicum majusculum* | |
| Poaceae | *Panicum trachyrhachis* | |
| Poaceae | Poaceae sp. (indet) | |
| Poaceae | *Triodia caelestialis* | |
| Poaceae | *Urochloa trichopus* | |
| Portulacaceae | *Portulaca bicolor* | |
| Portulacaceae | *Portulaca* sp. (indet) | |
| Proteaceae | *Grevillea pyramidalis* subsp. *pyramidalis* | |
| Proteaceae | *Hakea arborescens* | |
| Proteaceae | *Hakea macrocarpa* | |
| Rubiaceae | *Spermacoce occidentalis* | |
| Santalaceae | *Santalum lanceolatum* | |
| Sapindaceae | *Atalaya hemiglauca* | |
| Sapindaceae | *Dodonaea hispidula* | |
| Solanaceae | *Solanum cunninghamii* | |
| Zygophyllaceae | *Tribulopis angustifolia* | |

**Halls Creek species list**

| Family | Species | Status |
|---|---|---|
| Aizoaceae | *Trianthema oxycalyptrum* var. *oxycalyptrum* | |
| Aizoaceae | *Trianthema triquetrum* | |
| Amaranthaceae | *Aerva javanica* | * |
| Amaranthaceae | *Gomphrena canescens* | |
| Amaranthaceae | *Ptilotus calostachyus* | |
| Amaranthaceae | *Ptilotus exaltatus* | |
| Amaranthaceae | *Ptilotus fusiformis* | |
| Amaranthaceae | *Ptilotus spicatus* | |
| Asteraceae | *Minuria* sp. (indet) | |
| Bignoniaceae | *Dolichandrone occidentalis* | |
| Boraginaceae | *Ehretia saligna* | |
| Boraginaceae | *Euploca cunninghamii* | |
| Boraginaceae | *Euploca* sp. (indet) | |
| Boraginaceae | *Trichodesma zeylanicum* | |
| Byblidaceae | *Byblis rorida* | |
| Capparaceae | *Capparis lasiantha* | |
| Capparaceae | *Capparis umbonata* | |
| Caryophyllaceae | *Polycarpaea holtzei* | |
| Caryophyllaceae | *Polycarpaea longiflora* | |
| Celastraceae | *Stackhousia intermedia* | |

| Family | Species | Status |
|---|---|---|
| Chenopodiaceae | *Maireana georgei* | |
| Chenopodiaceae | *Salsola australis* | |
| Cleomaceae | *Arivela viscosa* | |
| Commelinaceae | *Commelina ensifolia* | |
| Commelinaceae | *Murdannia graminea* | |
| Convolvulaceae | *Evolvulus alsinoides* var. *decumbens* | |
| Convolvulaceae | *Evolvulus alsinoides* var. *villosicalyx* | |
| Convolvulaceae | *Ipomoea nil* | * |
| Convolvulaceae | *Ipomoea polymorpha* | |
| Cucurbitaceae | *Cucumis melo* | |
| Cyperaceae | *Cyperus pulchellus* | |
| Cyperaceae | *Cyperus squarrosus* | |
| Cyperaceae | *Cyperus vaginatus* | |
| Cyperaceae | *Fimbristylis dichotoma* | |
| Cyperaceae | *Fimbristylis simulans* | |
| Euphorbiaceae | *Euphorbia coghlanii* | |
| Euphorbiaceae | *Euphorbia schultzii* var. *schultzii* | |
| Fabaceae | *Acacia adoxa* | |
| Fabaceae | *Acacia ancistrocarpa* | |
| Fabaceae | *Acacia colei* | |
| Fabaceae | *Acacia ptychophylla* | |
| Fabaceae | *Acacia retivenea* subsp. *retivenea* | |
| Fabaceae | *Acacia tenuissima* | |
| Fabaceae | *Acacia trachycarpa* | |
| Fabaceae | *Alysicarpus muelleri* | |
| Fabaceae | *Clitoria ternatea* | * |
| Fabaceae | *Crotalaria cunninghamii* subsp. *sturtii* | |
| Fabaceae | *Crotalaria medicaginea* var. *neglecta* | |
| Fabaceae | *Crotalaria montana* var. *angustifolia* | |
| Fabaceae | *Cullen martinii* | |
| Fabaceae | *Indigastrum parviflorum* | |
| Fabaceae | *Indigofera colutea* | |
| Fabaceae | *Indigofera linifolia* | |
| Fabaceae | *Indigofera linnaei* | |
| Fabaceae | *Indigofera monophylla* | |
| Fabaceae | *Leucaena leucocephala* subsp. *leucocephala* | * |
| Fabaceae | *Lysiphyllum cunninghamii* | |
| Fabaceae | *Neptunia scutata* | |
| Fabaceae | *Rhynchosia minima* | |
| Fabaceae | *Senna oligoclada* | |
| Fabaceae | *Sesbania cannabina* | |

| Family | Species | Status |
|---|---|---|
| Fabaceae | *Stylosanthes hamata* | * |
| Fabaceae | *Tephrosia leptoclada* | |
| Fabaceae | *Vigna lanceolata* var. *lanceolata* | |
| Fabaceae | *Zornia muriculata* | |
| Goodeniaceae | *Goodenia crenata* | P3 |
| Goodeniaceae | *Goodenia scaevolina* | |
| Goodeniaceae | *Goodenia* sp. (indet) | |
| Lauraceae | *Cassytha filiformis* | |
| Loganiaceae | *Mitrasacme nudicaulis* var. *citrina* | |
| Loganiaceae | *Mitrasacme retroloba* | |
| Malvaceae | *Adansonia gregorii* | |
| Malvaceae | *Corchorus aestuans* | |
| Malvaceae | *Corchorus tridens* | |
| Malvaceae | *Gossypium australe* | |
| Malvaceae | *Hibiscus sturtii* | |
| Malvaceae | *Melhania oblongifolia* | |
| Malvaceae | *Sida fibulifera* | |
| Malvaceae | *Sida* sp. Excedentifolia (J.L Egan 1925) | |
| Malvaceae | *Waltheria indica* | |
| Meliaceae | *Azadirachta indica* | * |
| Molluginaceae | *Trigastrotheca molluginea* | |
| Myrtaceae | *Corymbia ferruginea* subsp. *stypophylla* | |
| Myrtaceae | *Eucalyptus alba* var. *australasica* | |
| Myrtaceae | *Eucalyptus victrix* | |
| Myrtaceae | *Melaleuca bracteata* | |
| Nyctaginaceae | *Boerhavia paludosa* | |
| Onagraceae | *Ludwigia perennis* | |
| Orobanchaceae | *Striga squamigera* | |
| Passifloraceae | *Passiflora foetida* var. *hispida* | * |
| Phyllanthaceae | *Flueggea virosa* subsp. *melanthesoides* | |
| Phyllanthaceae | *Nellica maderaspatensis* | |
| Plantaginaceae | *Stemodia viscosa* | |
| Poaceae | *Aristida contorta* | |
| Poaceae | *Aristida holathera* var. *holathera* | |
| Poaceae | *Aristida pruinosa* | |
| Poaceae | *Bothriochloa pertusa* | |
| Poaceae | *Cenchrus ciliaris* | * |
| Poaceae | *Chrysopogon pallidus* | |
| Poaceae | *Cymbopogon procerus* | |
| Poaceae | *Cynodon convergens* | |
| Poaceae | *Enneapogon polyphyllus* | |

| Family | Species | Status |
|---|---|---|
| Poaceae | *Enneapogon purpurascens* | |
| Poaceae | *Eragrostis tenella* | * |
| Poaceae | *Eragrostis tenellula* | |
| Poaceae | *Eriachne ciliata* | |
| Poaceae | *Eriachne mucronata* | |
| Poaceae | *Eulalia aurea* | |
| Poaceae | *Heteropogon contortus* | |
| Poaceae | *Panicum decompositum* | |
| Poaceae | *Paspalidium rarum* | |
| Poaceae | *Perotis rara* | |
| Poaceae | *Schizachyrium fragile* | |
| Poaceae | *Sorghum plumosum* | |
| Poaceae | *Thaumastochloa major* | |
| Poaceae | *Themeda triandra* | |
| Poaceae | *Triodia wiseana* | |
| Poaceae | *Urochloa holosericea* subsp. *velutina* | |
| Poaceae | *Urochloa* sp. (indet) | |
| Poaceae | *Xerochloa barbata* | |
| Polygalaceae | *Polygala galeocephala* | |
| Polygalaceae | *Polygala longifolia* | |
| Portulacaceae | *Portulaca oleracea* | |
| Portulacaceae | *Portulaca* sp. (indet) | |
| Proteaceae | *Grevillea pyramidalis* subsp. *pyramidalis* | |
| Proteaceae | *Hakea lorea* | |
| Proteaceae | *Hakea* sp. (indet) | |
| Rubiaceae | *Spermacoce* sp. Platysperma (J.R. Clarkson 6546) | |
| Scrophulariaceae | *Eremophila latrobei* subsp. *filiformis* | |
| Scrophulariaceae | *Eremophila longifolia* | |
| Stylidiaceae | *Stylidium adenophorum* | |
| Violaceae | *Afrohybanthus aurantiacus* | |
| Violaceae | *Afrohybanthus enneaspermus* | |
| Zygophyllaceae | *Tribulopis angustifolia* | |

**Broome quadrat/releve data**

| Sample ID: Br-01 | VT05 | Site: G |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 07/02/2024 | Described by A. Sleep |
| **Coordinates:** | 122.2939306 | -17.9024618 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Red loam | **Aspect:** | Flat |
| **Drainage:** | Poor | **Vegetation condition:** | Very good |
| **Bare ground:** | 30% | **Fire age and intensity:** | 3 years |
| **Litter cover:** | 40% | **Disturbance:** | Cattle activity |



| Br-01 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia ?tumida* var. *tumida* | | 2 | 1.5 | Shrub (M) | Vegetative |
| *Acacia adoxa* var. *subglabra* | | 1 | 1.25 | Shrub (M) | Vegetative |
| *Acacia colei* var. *colei* | | 15 | 4 | Tree (U) | Vegetative |
| *Acacia eriopoda* | | 40 | 7 | Tree (U) | Vegetative |
| *Brachychiton diversifolius* subsp. *diversifolius* | | 3 | 3 | Tree (U) | Vegetative |
| *Cajanus marmoratus* | | 1 | 0.25 | Vine (G) | Vegetative |
| *Corchorus ?sidoides* subsp. *sidoides* | | 3 | 0.5 | Shrub (M) | Vegetative |

| Br-01 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Corymbia ?flavescens* | | 2 | 7 | Tree (U) | Vegetative |
| *Cucumis variabilis* | | 1 | 0.1 | Vine (G) | Vegetative |
| *Dodonaea hispidula* var. *arida* | | 5 | 1.25 | Shrub (M) | Vegetative |
| *Dolichandrone occidentalis* | | 1 | 1.5 | Shrub (M) | Vegetative |
| *Ehretia saligna* var. *saligna* | | 5 | 3 | Shrub (M) | Vegetative |
| *Eucalyptus tectifica* | | 2 | 7 | Tree (U) | Vegetative |
| *Ficus aculeata* var. *indecora* | | 1 | 1.25 | Shrub (M) | Vegetative |
| *Gardenia pyriformis* subsp. *keartlandii* | | 1 | 2.75 | Shrub (M) | Vegetative |
| *Hakea macrocarpa* | | 1 | 1.5 | Shrub (M) | Vegetative |
| *Lysiphyllum cunninghamii* | | 2 | 4 | Tree (U) | Vegetative |
| *Persoonia falcata* | | 1 | 3 | Tree (U) | Vegetative |
| *Poaceae* sp. (indet) | | 40 | 0.5 | Tussock grass (G) | Vegetative |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | P3 | 4 | 0.25 | Forb (G) | Vegetative |
| *Pterocaulon ?intermedium* | | 30 | 1.25 | Forb (G) | Vegetative |
| *Tinospora smilacina* | | 1 | 0.25 | Vine (G) | Vegetative |
| *Trichodesma zeylanicum* var. *latisepaleum* | | 10 | 1.25 | Forb (G) | Flower |
| *Triodia caelestialis* | | 30 | 0.75 | Forb (G) | Vegetative and Flower |

| Sample ID: Br-R01 | VT05 | Site: G-H Connection |
|---|---|---|
| **Type:** | Relevé | 50 x 50 m |
| **Date:** | 10/02/2024 | Described by A. Benkovic |
| **Coordinates:** | 122.2872509 | -17.8849161 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Red sandy clay | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Very good |
| **Bare ground:** | <2% | **Fire age and intensity:** | ~3 yrs |
| **Litter cover:** | 30% | **Disturbance:** | Negligible |



| Br-R01 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia adoxa* var. *subglabra* | | 1 | 0.5 | Shrub, cycad, grass-tree (M) | Vegetative |
| *Acacia colei* var. *colei* | | 1 | 5 | Tree (U) | Vegetative |
| *Acacia eriopoda x tumida* var. *tumida* | | 50 | 6 | Tree (U) | Vegetative |
| *Corymbia zygophylla* | | 1 | 7 | Tree (U) | Vegetative |
| *Dodonaea hispidula* var. *arida* | | 2 | 1.5 | Shrub, cycad, grass-tree (M) | Vegetative |
| *Dolichandrone occidentalis* | | 1 | 0.8 | Shrub, cycad, grass-tree (M) | Vegetative |
| *Ficus aculeata* var. *indecora* | | 1 | 2 | Tree (U) | Vegetative |
| Poaceae sp. (indet) | | 10 | 1.5 | Tussock grass (G) | Vegetative |
| *Pterocaulon ?intermedium* | | 1 | 0.5 | Forb (G) | Vegetative |
| *Triodia caelestialis* | | 40 | 1.5 | Hummock grass (G) | Vegetative |
| *Waltheria indica* | | 3 | 1 | Forb (G) | Flower |

| Sample ID: Br-02 | VT05 | Site: G |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 07/02/2024 | Described by A. Sleep |
| **Coordinates:** | 122.2970366 | -17.9200666 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Red loamy sand | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Very good |
| **Bare ground:** | 40% | **Fire age and intensity:** | >5 years |
| **Litter cover:** | 5% | **Disturbance:** | Negligible |



| Br-02 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia adoxa* var. *subglabra* | | 1 | 1.25 | Shrub, cycad, grass-tree (M) | Vegetative |
| *Acacia colei* var. *colei* | | 1 | 4 | Tree (U) | Vegetative |
| *Acacia eriopoda* | | 30 | 5.75 | Tree (U) | Vegetative |
| *Aristida holathera* var. *holathera* | | 1 | 0.5 | Tussock grass (G) | Vegetative |
| *Bonamia oblongifolia* | P3 | 1 | 0.25 | Forb (G) | Flower |
| *Brachychiton diversifolius* subsp. *diversifolius* | | 2 | 3 | Tree (U) | Vegetative |
| *Buchnera* sp. (indet) | | 1 | 0.5 | Forb (G) | Dehisced fruit |

| Br-02 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Corchorus ?sidoides* subsp. *sidoides* | | 1 | 1 | Shrub, cycad, grass-tree (M) | Vegetative |
| *Corymbia greeniana* | | 1 | 6 | Tree (U) | Vegetative |
| *Corymbia zygophylla* | | 1 | 4 | Tree (U) | Vegetative |
| *Dodonaea hispidula* var. *arida* | | 1 | 1.25 | Shrub, cycad, grass-tree (M) | Vegetative |
| *Dolichandrone occidentalis* | | 2 | 2 | Shrub, cycad, grass-tree (M) | Vegetative |
| *Ficus aculeata* var. *indecora* | | 1 | 3 | Tree (U) | Vegetative |
| *Glycine tomentella* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Hakea macrocarpa* | | 1 | 2.5 | Tree (U) | Vegetative |
| *Jasminum didymum* subsp. *lineare* | | 1 | 1.75 | Shrub, cycad, grass-tree (M) | Vegetative |
| *Lysiana spathulata* subsp. *spathulata* | | 1 | 0.5 | Other (hemiparasitic aerial shrub) (U) | Flowerbud |
| *Lysiphyllum cunninghamii* | | 1 | 2.75 | Tree (U) | Vegetative |
| *Persoonia falcata* | | 1 | 4 | Tree (U) | Vegetative |
| *Planchonia careya* | | 2 | 3 | Tree (U) | Vegetative |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | P3 | 1 | 0.25 | Tree (U) | Vegetative |
| *Pterocaulon ?intermedium* | | 1 | 1 | Forb (G) | Vegetative |
| *Spermacoce occidentalis* | | 40 | 0.25 | Forb (G) | Dehisced fruit |
| *Trichodesma zeylanicum* var. *latisepaleum* | | 3 | 1.25 | Forb (G) | Flower |
| *Triodia caelestialis* | | 30 | 0.5 | Hummock grass (G) | Flower / Vegetative |
| *Ventilago viminalis* | | 1 | 1.75 | Shrub, cycad, grass-tree (M) | Vegetative |
| *Waltheria indica* | | 2 | 1.25 | Shrub, cycad, grass-tree (M) | Flower |

| Sample ID: Br-R02 | VT05 | Site G-H Connection |
|---|---|---|
| **Type:** | Relevé | 50 x 50 m |
| **Date:** | 10/02/2024 | Described by A. Benkovic |
| **Coordinates:** | 122.2926256 | -17.8838815 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Red sandy clay | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Excellent to very good |
| **Bare ground:** | <2% | **Fire age and intensity:** | Long unburnt |
| **Litter cover:** | 30% | **Disturbance:** | Road and tracks present |



| Br-02 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia adoxa* var. *subglabra* | | 30 | 1 | Shrub, cycad, grass-tree (M) | Vegetative |
| *Acacia colei* var. *colei* | | 5 | 2 | Tree (U) | Vegetative |
| *Acacia eriopoda x tumida* var. *tumida* | | 30 | 6 | Tree (U) | Vegetative |
| *Brachychiton diversifolius* subsp. *diversifolius* | | 1 | 2 | Tree (U) | Vegetative |
| *Corymbia ?flavescens* | | 1 | 20 | Tree (U) | Vegetative |
| *Dodonaea hispidula* var. *arida* | | 2 | 1.5 | Shrub, cycad, grass-tree (M) | Vegetative |
| *Ehretia saligna* var. *saligna* | | 2 | 3 | Tree (U) | Vegetative |

| Br-02 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Ficus aculeata* var. *indecora* | | 1 | 3 | Tree (U) | Vegetative |
| *Jasminum didymum* subsp. *lineare* | | 1 | 1.75 | Shrub, cycad, grass-tree (M) | Vegetative |
| *Persoonia falcata* | | 1 | 2 | Tree (U) | Vegetative |
| Poaceae sp. (indet) | | 5 | 1.5 | Tussock grass (G) | Vegetative |
| *Triodia caelestialis* | | 15 | 1.5 | Hummock grass (G) | Flower |

| Sample ID: Br-03 | VT05 | Site: H |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 08/02/2024 | Described by A. Sleep |
| **Coordinates:** | 122.3050085 | -17.933103 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Red sandy loam | **Aspect:** | Flat dune top |
| **Drainage:** | Good | **Vegetation condition:** | Very good |
| **Bare ground:** | 40% | **Fire age and intensity:** | >5 years |
| **Litter cover:** | 40% | **Disturbance:** | Dry |



| Br-03 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia ?eriopoda x tumida* var. *tumida* | | 1 | 1.25 | Shrub (M) | Vegetative |
| *Acacia eriopoda* | | 30 | 5.75 | Tree (U) | Vegetative |
| *Acacia platycarpa* | | 1 | 1 | Shrub (M) | Vegetative |
| *Aristida holathera var. latifolia* | | 10 | 0.5 | Tussock grass (G) | Vegetative |
| *Brachychiton ?diversifolius* subsp. *diversifolius* | | 1 | 1.5 | Tree (U) | Vegetative |
| *Brachychiton diversifolius* subsp. *diversifolius* | | 1 | 3 | Tree (U) | Vegetative |
| *Corchorus ?sidoides* subsp. *sidoides* | | 1 | 0.5 | Shrub (M) | Vegetative |
| *Corymbia ?flavescens* | | 2 | 6 | Tree (U) | Vegetative |
| *Corymbia greeniana* | | 2 | 6.75 | Tree (U) | Vegetative |
| *Corynotheca gracilis* | | 1 | 0.75 | Forb (G) | Vegetative |
| *Crotalaria medicaginea* var. *neglecta* | | 1 | 0.25 | Forb (G) | Fruit |
| *Dodonaea hispidula* var. *arida* | | 1 | 1.25 | Shrub (M) | Fruit |
| *Ficus aculeata* var. *indecora* | | 1 | 2.75 | Tree (U) | Vegetative |
| *Gardenia pyriformis* subsp. *keartlandii* | | 1 | 1.75 | Shrub (M) | Vegetative |
| *Grevillea refracta* subsp. *refracta* | | 1 | 1.25 | Shrub (M) | Vegetative |
| *Hakea macrocarpa* | | 2 | 3.75 | Tree (U) | Vegetative |
| *Lysiphyllum cunninghamii* | | 2 | 4.5 | Tree (U) | Vegetative |
| *Persoonia falcata* | | 2 | 3 | Tree (U) | Vegetative |
| *Planchonia careya* | | 1 | 2 | Tree (U) | Vegetative |
| *Pterocaulon ?intermedium* | | 1 | 1 | Forb (G) | Vegetative |
| *Solanum cunninghamii* | | 1 | 0.5 | Shrub (M) | Vegetative |
| *Trichodesma zeylanicum* var. *latisepaleum* | | 3 | 1.25 | Forb (G) | Flower |
| *Triodia caelestialis* | | 2 | 1 | Hummock grass (G) | Flower |
| *Ventilago viminalis* | | 1 | 2.25 | Tree (U) | Vegetative |
| *Waltheria indica* | | 1 | 0.5 | Shrub, cycad, grass-tree (M) | Flower |

| Sample ID: Br-04 | VT05 | Site: H |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 08/02/2024 | Described by A. Sleep |
| **Coordinates:** | 122.2935461 | -17.9321982 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Red clay loam | **Aspect:** | Flat |
| **Drainage:** | Good to moderate | **Vegetation condition:** | Very good |
| **Bare ground:** | 20% | **Fire age and intensity:** | 3 years |
| **Litter cover:** | 20% | **Disturbance:** | Negligible |



| Br-04 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia ?eriopoda x tumida* var. *tumida* | | 1 | 1.5 | Shrub (M) | Vegetative |
| *Acacia ?tumida* var. *tumida* | | 2 | 1.5 | Shrub (M) | Vegetative |
| *Acacia adoxa* var. *subglabra* | | 1 | 0.5 | Shrub (M) | Vegetative |
| *Acacia colei* var. *colei* | | 1 | 5 | Tree (U) | Vegetative |
| *Acacia eriopoda* | | 30 | 6 | Tree (U) | Vegetative |
| *Acacia platycarpa* | | 1 | 0.75 | Shrub (M) | Vegetative |
| *Alstonia linearis* | | 1 | 1.75 | Shrub (M) | Vegetative |
| *Aristida* sp. (indet) | | 10 | 0.75 | Tussock grass (G) | Vegetative |
| *Brachychiton diversifolius* subsp. *diversifolius* | | 3 | 4 | Tree (U) | Vegetative |

| Br-04 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Cajanus marmoratus* | | 1 | 0.25 | Vine (G) | Vegetative |
| *Carissa lanceolata* | | 1 | 2 | Shrub (M) | Vegetative |
| *Cassytha capillaris* | | 1 | 0.25 | Vine (G) | Flower |
| *Corchorus ?sidoides* subsp. *sidoides* | | 1 | 0.5 | Shrub (M) | Vegetative |
| *Corymbia ?flavescens* | | 1 | 7 | Tree (U) | Vegetative |
| *Corymbia greeniana* | | 2 | 7 | Tree (U) | Vegetative |
| *Corymbia zygophylla* | | 2 | 7 | Tree (U) | Vegetative |
| *Dodonaea hispidula* var. *arida* | | 1 | 1 | Shrub (M) | Vegetative |
| *Dolichandrone occidentalis* | | 1 | 0.75 | Shrub (M) | Vegetative |
| *Ehretia saligna* var. *saligna* | | 1 | 2.25 | Shrub (M) | Vegetative |
| *Ficus aculeata* var. *indecora* | | 1 | 2 | Tree (U) | Vegetative |
| *Gardenia pyriformis* subsp. *keartlandii* | | 1 | 2 | Tree (U) | Vegetative |
| *Glycine tomentella* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Hakea macrocarpa* | | 4 | 4 | Tree (U) | Vegetative |
| *Hibiscus leptocladus* | | 1 | 1 | Shrub (M) | Dehisced Fruit |
| *?Kirganelia baccata* | 0 | 1 | 2.25 | Shrub (M) | Vegetative |
| *Lysiphyllum cunninghamii* | | 3 | 4 | Tree (U) | Vegetative |
| *Persoonia falcata* | | 1 | 3 | Tree (U) | Vegetative |
| *Planchonia careya* | | 1 | 3.75 | Shrub (M) | Vegetative |
| Poaceae sp. (indet) | | 1 | 0.5 | Tussock grass (G) | Vegetative |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | P3 | 1 | 0.25 | Forb (G) | Vegetative |
| *Pterocaulon ?intermedium* | | 1 | 0.75 | Forb (G) | Vegetative |
| *Trichodesma zeylanicum* var. *latisepaleum* | | 10 | 1.25 | Shrub (M) | Flower |
| *Triodia caelestialis* | | 40 | 0.5 | Hummock grass (G) | Flower |
| *Waltheria indica* | | 1 | 1 | Shrub (M) | Flower |

| Sample ID: Br-05 | VT05 | Site: F |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 06/03/2024 | Described by A. Sleep |
| **Coordinates:** | 122.2765400 | -17.8667504 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Red-orange clay loam | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Excellent |
| **Bare ground:** | 10% | **Fire age and intensity:** | 3 years |
| **Litter cover:** | 2% | **Disturbance:** | Negligible |



| Br-05 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia ?eriopoda x tumida* var. *tumida* | | 1 | 1.25 | Shrub (M) | Vegetative |
| *Acacia eriopoda* | | 30 | 5.75 | Tree (U) | Vegetative |
| *Acacia platycarpa* | | 1 | 1 | Shrub (M) | Vegetative |
| *Aristida holathera* var. *latifolia* | | 10 | 0.5 | Tussock Grass (G) | Flower |
| *Brachychiton ?diversifolius* subsp. *diversifolius* | | 1 | 1.5 | Shrub (M) | Vegetative |
| *Brachychiton diversifolius* subsp. *diversifolius* | | 1 | 3 | Tree (U) | Vegetative |
| *Corchorus ?sidoides* subsp. *sidoides* | | 1 | 0.5 | Shrub (M) | Vegetative |
| *Corymbia ?flavescens* | | 2 | 6 | Tree (U) | Vegetative |
| *Corymbia greeniana* | | 2 | 6.75 | Tree (U) | Vegetative |

| Br-05 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Corynotheca gracilis* | | 1 | 0.75 | Forb (G) | Vegetative |
| *Crotalaria medicaginea* var. *neglecta* | | 1 | 0.25 | Shrub (M) | Flower |
| *Dodonaea hispidula* var. *arida* | | 1 | 1.25 | Shrub (M) | Vegetative |
| *Ficus aculeata* var. *indecora* | | 1 | 2.75 | Tree (U) | Vegetative |
| *Gardenia pyriformis* subsp. *keartlandii* | | 1 | 1.75 | Shrub (M) | Vegetative |
| *Grevillea refracta* subsp. *refracta* | | 1 | 1.25 | Shrub (M) | Vegetative |
| *Hakea macrocarpa* | | 2 | 3.75 | Tree (U) | Vegetative |
| *Lysiphyllum cunninghamii* | | 2 | 4.5 | Tree (U) | Vegetative |
| *Persoonia falcata* | | 2 | 3 | Tree (U) | Vegetative |
| *Planchonia careya* | | 1 | 2 | Tree (U) | Vegetative |
| *Pterocaulon ?intermedium* | | 1 | 1 | Forb (G) | Vegetative |
| *Solanum cunninghamii* | | 1 | 0.5 | Shrub (M) | Vegetative |
| *Trichodesma zeylanicum* var. *latisepaleum* | | 3 | 1.25 | Forb (G) | Flower |
| *Triodia caelestialis* | | 2 | 1 | Hummock grass (G) | Flower |
| *Ventilago viminalis* | | 1 | 2.25 | Shrub (M) | Vegetative |
| *Waltheria indica* | | 1 | 0.5 | Shrub (M) | Flower |

| Sample ID: Br-06 | VT06 | Site ID: F |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 07/03/2024 | Described by A. Sleep |
| **Coordinates:** | 122.2792082 | -17.8694363 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Red-orange sandy clay loam | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Excellent |
| **Bare ground:** | 20% | **Fire age and intensity:** | 4 years |
| **Litter cover:** | 2% | **Disturbance:** | Negligible |



| Br-06 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Abutilon* sp. (indet) | | 1 | 0.1 | Shrub (M) | Vegetative |
| *Acacia ?stipuligera* | | 1 | 4.5 | Shrub (M) | Vegetative |
| *Acacia eriopoda* | | 40 | 4 | Tree (U) | Vegetative |
| *Aristida* sp. (indet) | | 2 | 0.75 | Tussock grass (G) | Vegetative |
| *Brachychiton diversifolius* subsp. *diversifolius* | | 1 | 1.75 | Tree (U) | Vegetative |
| *Buchnera ?ramosissima* | | 1 | 0.5 | Forb (G) | Dehisced fruit |
| *Chamaecrista symonii* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Chrysopogon ?pallidus* | | 20 | 0.5 | Tussock grass (G) | Vegetative |
| *Corchorus ?sidoides* subsp. *sidoides* | | 2 | 0.25 | Shrub (M) | Vegetative |

| Br-06 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Corymbia ?flavescens* | | 1 | 6 | Tree (U) | Vegetative |
| *Cucumis variabilis* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Dodonaea hispidula* var. *arida* | | 1 | 1 | Shrub (M) | Vegetative |
| *Dolichandrone occidentalis* | | 1 | 1.25 | Shrub (M) | Vegetative |
| *Ehretia saligna* var. *saligna* | | 1 | 1.25 | Shrub (M) | Vegetative |
| *Evolvulus alsinoides* var. *decumbens* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Ficus aculeata* var. *indecora* | | 1 | 1.75 | Shrub (M) | Vegetative |
| *Flueggea virosa* subsp. *melanthesoides* | | 1 | 1.5 | Shrub (M) | Fruit |
| *Gardenia pyriformis* subsp. *keartlandii* | | 3 | 2 | Shrub (M) | Flower and Fruit |
| *Glycine tomentella* | | 1 | 0.25 | Vine (G) | Vegetative |
| *Gyrocarpus americanus* subsp. *americanus* | | 1 | 1.5 | Shrub (M) | Vegetative |
| *Gyrocarpus americanus* subsp. *pachyphyllus* | | 10 | 4 | Tree (U) | Vegetative |
| *Hakea macrocarpa* | | 1 | 2 | Tree (U) | Vegetative |
| *Lysiphyllum cunninghamii* | | 1 | 1.75 | Tree (U) | Vegetative |
| *Persoonia falcata* | | 1 | 1.75 | Tree (U) | Vegetative |
| *Planchonia careya* | | 5 | 7 | Tree (U) | Vegetative |
| *Sida* sp. (indet) | | 1 | 0.25 | Shrub (M) | Vegetative |
| *Solanum cunninghamii* | | 1 | 0.5 | Shrub (M) | Vegetative |
| *Spermacoce occidentalis* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Tinospora smilacina* | | 1 | 0.25 | Vine (G) | Vegetative |
| *Trichodesma zeylanicum* var. *latisepaleum* | | 1 | 0.75 | Shrub (M) | Flower |
| *Triodia caelestialis* | | 55 | 0.5 | Hummock grass (G) | Flower |
| *Ventilago viminalis* | | 1 | 0.25 | Shrub (M) | Vegetative |
| *Waltheria indica* | | 1 | 0.5 | Shrub (M) | |

| Sample ID: Br-07 | VT07 | Site: F |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 08/03/2024 | Described by A. Sleep |
| **Coordinates:** | 122.2820196 | -17.8554865 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Red-orange sandy loam | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Very good |
| **Bare ground:** | 20% | **Fire age and intensity:** | 2-3 years |
| **Litter cover:** | 30% | **Disturbance:** | Negligible |



| Br-07 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia colei var. colei* | | 3 | 3 | Tree (U) | Vegetative |
| *Acacia eriopoda* | | 60 | 4 | Shrub (M) | Vegetative |
| *Brachychiton diversifolius subsp. diversifolius* | | 1 | 1.5 | Tree (U) | Vegetative |
| *Carissa lanceolata* | | 1 | 1.5 | Shrub (M) | Vegetative |
| *Chamaecrista symonii* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Codonocarpus cotinifolius* | | 1 | 1.25 | Shrub (M) | Vegetative |
| *Corchorus sidoides* subsp. *sidoides* | | 10 | 0.5 | Shrub (M) | Flower |
| *Corymbia zygophylla* | | 1 | 6 | Tree (U) | Vegetative |
| *Cucumis variabilis* | | 1 | 0.25 | Vine (G) | Vegetative |

| Br-07 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Dolichandrone occidentalis* | | 1 | 0.75 | Shrub (M) | Vegetative |
| *Ehretia saligna* var. *saligna* | | 5 | 1.75 | Shrub (M) | Vegetative |
| *Eriachne obtusa* | | 3 | 0.5 | Tussock grass (G) | Flower |
| *Ficus aculeata* var. *indecora* | | 5 | 2.5 | Tree (U) | Vegetative |
| *Glycine tomentella* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Grevillea pyramidalis* subsp. *pyramidalis* | | 1 | 2 | Shrub (M) | Vegetative |
| *Hybanthus aurantiacus* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Persoonia falcata* | | 1 | 1.75 | Tree (U) | Vegetative |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | P3 | 1 | 0.25 | Forb (G) | Vegetative |
| *Sida rohlenae* subsp. *occidentalis* | | 1 | 0.5 | Shrub (M) | Flower |
| *Solanum cunninghamii* | | 1 | 0.5 | Shrub (M) | Flower |
| *Sorghum plumosum* | | 20 | 0.5 | Tussock grass (G) | Flower |
| *Tephrosia* sp. D Kimberley Flora (R.D. Royce 1848) | | 1 | 0.25 | Forb (G) | Flower |
| *Tinospora smilacina* | | 1 | 0.25 | Vine (G) | Vegetative |
| *Trichodesma zeylanicum* var. *latisepaleum* | | 1 | 0.75 | Shrub (M) | Flower |
| *Triodia caelestialis* | | 60 | 0.5 | Hummock grass (G) | Flower |
| *Waltheria indica* | | 1 | 0.5 | Shrub (M) | Flower |

| Sample ID: Br-08 | VT05 | Site: F |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 09/03/2024 | Described by A. Sleep |
| **Coordinates:** | 122.2771450 | -17.8793074 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Red-orange sandy loam | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Excellent |
| **Bare ground:** | 5% | **Fire age and intensity:** | 3 years |
| **Litter cover:** | 20% | **Disturbance:** | Negligible |



| Br-08 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Abutilon otocarpum* | | 1 | 0.25 | Shrub (M) | Flower |
| *Acacia adoxa* var. *subglabra* | | 50 | 0.5 | Shrub (M) | Vegetative |
| *Acacia colei* var. *colei* | | 2 | 3 | Tree (U) | Vegetative |
| *Acacia eriopoda* | | 60 | 4 | Shrub (M) | Vegetative |
| *Brachychiton diversifolius* subsp. *diversifolius* | | 2 | 4 | Shrub (M) | Vegetative |
| *Cajanus marmoratus* | | 1 | 0.25 | Vine (G) | Vegetative |
| *Chrysopogon pallidus* | | 20 | 0.5 | Tussock grass (G) | Flower |
| *Corchorus ?sidoides* subsp. *sidoides* | | 10 | 0.25 | Shrub (M) | Vegetative |
| *Dodonaea hispidula* var. *arida* | | 15 | 1.75 | Shrub (M) | Fruit |

| Br-08 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Dolichandrone occidentalis* | | 1 | 0.75 | Shrub (M) | Vegetative |
| *Ehretia saligna* var. *saligna* | | 1 | 1.75 | Shrub (M) | Vegetative |
| *Ficus aculeata* var. *indecora* | | 1 | 2.5 | Tree (U) | Vegetative |
| *Gymnema erectum* | | 1 | 1.25 | Shrub (M) | Fruit |
| *Hakea macrocarpa* | | 1 | 2 | Tree (U) | Dehisced fruit |
| *Jasminum didymum* subsp. *lineare* | | 1 | 0.5 | Shrub (M) | Vegetative |
| *Lysiphyllum cunninghamii* | | 5 | 3 | Tree (U) | Vegetative |
| *Melhania oblongifolia* | | 1 | 0.25 | Shrub (M) | Flower |
| *Murdannia graminea* | | 1 | 0.25 | Forb (G) | Flower |
| *Persoonia falcata* | | 1 | 1.75 | Tree (U) | Vegetative |
| *Planchonia careya* | | 1 | 3 | Tree (U) | Vegetative |
| *Pterocaulon ?intermedium* | | 1 | 0.5 | Forb (G) | Vegetative |
| *Sida rohlenae* subsp. *occidentalis* | | 1 | 0.25 | Shrub (M) | Flower |
| *Solanum cunninghamii* | | 1 | 0.5 | Shrub (M) | Flower |
| *Tinospora smilacina* | | 1 | 0.25 | Vine (G) | Vegetative |
| *Trichodesma zeylanicum* var. *latisepaleum* | | 1 | 0.75 | Shrub (M) | Flower |
| *Triodia caelestialis* | | 40 | 0.5 | Hummock grass (G) | Flower |
| *Waltheria indica* | | 1 | 0.75 | Shrub (M) | Flower |

| Sample ID: Br-09 | VT06 | Site: F |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 09/03/2024 | Described by A. Sleep |
| **Coordinates:** | 122.2843050 | -17.8841821 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Red-orange sandy loam | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Excellent |
| **Bare ground:** | 15% | **Fire age and intensity:** | 5+ years |
| **Litter cover:** | 5% | **Disturbance:** | Minimal |



| Br-09 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia adoxa* var. *subglabra* | | 1 | 0.5 | Shrub (M) | Vegetative |
| *Acacia colei* var. *colei* | | 1 | 3 | Tree (U) | Vegetative |
| *Acacia eriopoda* | | 30 | 4 | Shrub (M) | Vegetative |
| *Brachychiton ?diversifolius* subsp. *diversifolius* | | 1 | 1.5 | Shrub (M) | Vegetative |
| *Brachychiton diversifolius* subsp. *diversifolius* | | 1 | 4 | Shrub (M) | Vegetative |
| *Carissa lanceolata* | | 1 | 1.75 | Shrub (M) | Vegetative |
| *Chrysopogon pallidus* | | 20 | 0.5 | Tussock grass (G) | Flower |
| *Corchorus sidoides* subsp. *sidoides* | | 1 | 0.25 | Shrub (M) | Flower |
| *Corymbia greeniana* | | 1 | 6 | Tree (U) | Vegetative |

| Br-09 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Corymbia zygophylla* | | 1 | 6 | Tree (U) | Vegetative |
| *Crotalaria medicaginea* var. *neglecta* | | 1 | 0.5 | Forb (G) | Flower |
| *Cucumis variabilis* | | 1 | 0.25 | Vine (G) | Vegetative |
| *Dolichandrone occidentalis* | | 1 | 0.75 | Shrub (M) | Vegetative |
| *Ehretia saligna* var. *saligna* | | 1 | 1.75 | Shrub (M) | Vegetative |
| *Eragrostis eriopoda* | | 1 | 0.25 | Tussock grass (G) | Vegetative |
| *Eragrostis* sp. (indet) | | 2 | 0.5 | Tussock grass (G) | Vegetative |
| *Gardenia pyriformis* subsp. *keartlandii* | | 1 | 2.25 | Shrub (M) | Flower / fruit |
| *Gyrocarpus americanus* subsp. *americanus* | | 1 | 1.5 | Shrub (M) | Vegetative |
| *Hakea macrocarpa* | | 1 | 2 | Tree (U) | Dehisced fruit |
| *Jasminum didymum* subsp. *lineare* | | 1 | 0.5 | Shrub (M) | Vegetative |
| *Kirganelia baccata* | | 1 | 1.75 | Shrub (M) | Fruit |
| *Murdannia graminea* | | 1 | 0.25 | Forb (G) | Flower |
| *Persoonia falcata* | | 1 | 1.75 | Tree (U) | Vegetative |
| *Planchonia careya* | | 3 | 5 | Tree (U) | Vegetative |
| *Pterocaulon ?intermedium* | | 1 | 0.5 | Forb (G) | Vegetative |
| *Sersalisia sericea* | | 2 | 6 | Tree (U) | Vegetative |
| *Sida rohlenae* subsp. *occidentalis* | | 1 | 0.5 | Shrub (M) | Flower |
| *Sorghum plumosum* | | 2 | 1.25 | Tussock grass (G) | Flower |
| *Tinospora smilacina* | | 1 | 0.25 | Vine (G) | Vegetative |
| *Trichodesma zeylanicum* var. *latisepaleum* | | 1 | 0.75 | Shrub (M) | Flower |
| *Triodia caelestialis* | | 30 | 0.5 | Hummock grass (G) | Flower |
| *Ventilago viminalis* | | 1 | 1.25 | Shrub (M) | Vegetative |
| *Waltheria indica* | | 1 | 0.75 | Shrub (M) | Flower |

| Sample ID: Br-R10 | VT05 | Site: F Connection |
|---|---|---|
| **Type:** | Relevé | 50 x 50 m |
| **Date:** | 09/03/2024 | Described by A. Sleep |
| **Coordinates:** | 122.2679947 | -17.8886170 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Red-orange sandy loam | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Good |
| **Bare ground:** | 8% | **Fire age and intensity:** | 4+ years |
| **Litter cover:** | 40% | **Disturbance:** | Narrow corridor between road & track |



| Br-R10 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Abutilon otocarpum* | | 1 | 0.25 | Shrub (M) | Flower |
| *Acacia colei* var. *colei* | | 1 | 3 | Tree (U) | Vegetative |
| *Acacia eriopoda* | | 10 | 4 | Shrub (M) | Vegetative |
| *Acacia platycarpa* | | 1 | 0.75 | Shrub (M) | Vegetative |
| *Alstonia linearis* | | 1 | 1 | Shrub (M) | Fruit |
| *Aristida* sp. (indet) | | 30 | 0.5 | Tussock grass (G) | Vegetative |
| *Azadirachta indica* | * | 1 | 6 | Tree (U) | Vegetative |
| *Brachychiton diversifolius* subsp. *diversifolius* | | 1 | 4 | Shrub (M) | Vegetative |

| Br-R10 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Breynia cernua* | | 1 | 1.25 | Shrub (M) | Fruit |
| *Cenchrus biflorus* | * | 1 | 0.75 | Tussock grass (G) | Fruit |
| *Cenchrus* sp. (indet) | | 10 | 0.75 | Tussock grass (G) | Vegetative |
| *Corchorus sidoides* subsp. *sidoides* | | 1 | 0.5 | Shrub (M) | Flower |
| *Corymbia ?flavescens* | | 1 | 6 | Tree (U) | Vegetative |
| *Corymbia flavescens* | | 2 | 9.5 | Tree (U) | Vegetative |
| *Corymbia greeniana* | | 10 | 6 | Tree (U) | Vegetative |
| *Crotalaria medicaginea* var. *neglecta* | | 1 | 0.5 | Forb (G) | Flower |
| *Ehretia saligna* var. *saligna* | | 20 | 1.75 | Shrub (M) | Vegetative |
| *Ficus aculeata* var. *indecora* | | 1 | 2.5 | Tree (U) | Vegetative |
| *Glycine tomentella* | | 2 | 0.25 | Vine (G) | Vegetative |
| *Grewia pindanica* | | 1 | 1.25 | Shrub (M) | Fruit |
| *Gyrocarpus americanus* subsp. *pachyphyllus* | | 1 | 1.75 | Tree (U) | Vegetative |
| *Jasminum didymum* subsp. *lineare* | | 1 | 0.75 | Shrub (M) | Vegetative |
| *Kirganelia baccata* | | 1 | 1.75 | Shrub (M) | Vegetative |
| *Lysiphyllum cunninghamii* | | 40 | 3 | Tree (U) | Vegetative |
| *Mesosphaerum suaveolens* | * | 1 | 0.75 | Forb (G) | Fruit |
| *Passiflora foetida* var. *hispida* | * | 1 | 0.75 | Vine (G) | Vegetative |
| *Persoonia falcata* | | 1 | 1.75 | Tree (U) | Vegetative |
| *Planchonia careya* | | 3 | 5 | Tree (U) | Vegetative |
| *Pterocaulon ?intermedium* | | 1 | 0.5 | Forb (G) | Vegetative |
| *Sorghum* sp. (indet) | | 70 | 0.5 | Tussock grass (G) | Vegetative |
| *Tinospora smilacina* | | 1 | 0.25 | Vine (G) | Vegetative |
| *Trichodesma zeylanicum* var. *latisepaleum* | | 1 | 0.75 | Shrub (M) | Flower |
| *Waltheria indica* | | 1 | 0.75 | Shrub (M) | Flower |

| Sample ID: Br-R11 | VT07 | Site: F Connection |
|---|---|---|
| **Type:** | Relevé | 50 x 50 m |
| **Date:** | 10/03/2024 | Described by A. Sleep |
| **Coordinates:** | 122.2586001 | -17.8951791 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Light brown sandy clay | **Aspect:** | Flat |
| **Drainage:** | Moderate to poor | **Vegetation condition:** | Good to degraded |
| **Bare ground:** | 2% | **Fire age and intensity:** | 4+ years |
| **Litter cover:** | 60% | **Disturbance:** | High: tracks & road present |



| Br-R11 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia colei* var. *colei* | | 5 | 3 | Tree (U) | Vegetative |
| *Azadirachta indica* | * | 5 | 6 | Tree (U) | Vegetative |
| *Chrysopogon pallidus* | | 20 | 0.75 | Tussock grass (G) | Flower |
| *Crotalaria medicaginea* var. *neglecta* | | 1 | 0.5 | Forb (G) | Flower |
| *Cynodon ?dactylon* | | 10 | 0.25 | Other grass (G) | Vegetative |
| *Cyperus conicus* | | 4 | 0.5 | Sedge (G) | Flower |
| *Drosera broomensis* | | 1 | 0.1 | Forb (G) | Flower |
| *Eragrostis speciosa* | | 10 | 0.75 | Tussock grass (G) | Flower |
| *Eucalyptus tectifica* | | 10 | 8 | Tree (U) | Fruit |
| *Fimbristylis ?rara* | | 1 | 0.25 | Sedge (G) | Flower |
| *Goodenia lamprosperma* | | 1 | 0.25 | Forb (G) | Flower |
| *Lindernia ?aplectra* | | 1 | 0.25 | Forb (G) | Flower |
| *Lysiphyllum cunninghamii* | | 10 | 5 | Tree (U) | Vegetative |
| *Melaleuca ?glomerata* | | 10 | 5 | Tree (U) | Fruit |
| *Melaleuca cajuputi* subsp. *cajuputi* | | 15 | 5 | Tree (U) | Fruit |
| *Mesosphaerum suaveolens* | * | 1 | 1.25 | Forb (G) | Flower |
| *Passiflora foetida* var. *hispida* | * | 35 | 0.75 | Vine (G) | Vegetative |

| Br-R11 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Stylosanthes hamata* | * | 1 | 0.25 | Forb (G) | Vegetative |

| Sample ID: BR-R12 | VT05 | Site: F Connection |
|---|---|---|
| **Type:** | Relevé | 50 x 50 m |
| **Date:** | 10/03/2024 | Described by A. Sleep |
| **Coordinates:** | 122.2480265 | -17.9122572 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Red-orange sandy loam | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Degraded |
| **Bare ground:** | 15% | **Fire age and intensity:** | 4+ years |
| **Litter cover:** | 80% | **Disturbance:** | High: tracks, weeds & road present |



| Br-R12 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia colei* var. *colei* | | 5 | 3 | Tree (U) | Vegetative |
| *Acacia eriopoda* | | 3 | 4 | Shrub (M) | Vegetative |
| *Alstonia linearis* | | 1 | 1.25 | Shrub (M) | Vegetative |
| *Azadirachta indica* | * | 5 | 6 | Tree (U) | Vegetative |
| *Calotropis gigantea* | * | 1 | 0.5 | Shrub (M) | Vegetative |
| *Chrysopogon pallidus* | | 20 | 0.75 | Tussock grass (G) | Vegetative |
| *Corymbia polycarpa* | | 15 | 12 | Tree (U) | Flowerbud |
| *Cullen martinii* | | 1 | 0.75 | Shrub (M) | Vegetative |

| Br-R12 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Distimake dissectus* var. *dissectus* | * | 45 | 1.25 | Vine (G) | Vegetative |
| *Ehretia saligna* var. *saligna* | | 2 | 3 | Shrub (M) | Vegetative |
| *Ficus aculeata* var. *indecora* | | 1 | 2.5 | Shrub (M) | Vegetative |
| *Gyrocarpus americanus* subsp. *pachyphyllus* | | 1 | 2.75 | Tree (U) | Vegetative |
| *Hibiscus apodus* | | 1 | 0.5 | Shrub (M) | Flower |
| *Kirganelia baccata* | | 1 | 1.25 | Shrub (M) | Vegetative |
| *Lysiphyllum cunninghamii* | | 10 | 5 | Tree (U) | Vegetative |
| *Mesosphaerum suaveolens* | * | 5 | 0.75 | Forb (G) | Fruit |
| *Passiflora foetida* var. *hispida* | * | 35 | 0.75 | Vine (G) | Vegetative |
| *Santalum lanceolatum* | | 1 | 1.75 | Shrub (M) | Vegetative |

| Sample ID: Br-R13 | VT08 | Site: F Connection |
|---|---|---|
| **Type:** | Relevé | 50 x 50 m |
| **Date:** | 10/03/2024 | Described by A. Sleep |
| **Coordinates:** | 122.2397049 | -17.9516356 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Orange-brown sandy clay | **Aspect:** | Flat |
| **Drainage:** | Poor | **Vegetation condition:** | Completely degraded |
| **Bare ground:** | 90 | **Fire age and intensity:** | Unburnt |
| **Litter cover:** | 0 | **Disturbance:** | High – mostly cleared |



| Br-R13 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Avicennia marina* subsp. *marina* | | 2 | 3.5 | Tree mallee (U) | Vegetative |
| *?Ceriops australis* | | 2 | 3.5 | Tree mallee (U) | Vegetative |
| *Neobassia astrocarpa* | | 1 | 0.25 | Shrub (M) | Vegetative |
| *Sesuvium portulacastrum* subsp. *portulacastrum* | | 1 | 0.25 | Shrub (M) | Vegetative |
| *Tecticornia ?pergranulata* subsp. *elongata* | | 4 | 0.25 | Shrub (M) | Vegetative |

| Sample ID: Br-14 | VT05 | Site: F |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 10/03/2024 | Described by A. Sleep |
| **Coordinates:** | 122.2825847 | -17.8440845 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Red-orange sandy loam | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Excellent |
| **Bare ground:** | 15% | **Fire age and intensity:** | 3 years |
| **Litter cover:** | 5% | **Disturbance:** | Negligible |



| Br-14 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia adoxa* var. *subglabra* | | 20 | 0.5 | Shrub (M) | Vegetative |
| *Acacia colei* var. *colei* | | 1 | 4 | Tree (U) | Vegetative |
| *Acacia eriopoda* | | 45 | 4 | Shrub (M) | Vegetative |
| *Bonamia oblongifolia* | P3 | 1 | 0.25 | Forb (G) | Flower |
| *Brachychiton diversifolius* subsp. *diversifolius* | | 1 | 1.75 | Shrub (M) | Vegetative |
| *Breynia cernua* | | 1 | 1.25 | Shrub (M) | Vegetative |
| *Cassytha capillaris* | | 2 | 0.25 | Vine (G) | Flower |
| *Chrysopogon pallidus* | | 5 | 0.75 | Tussock grass (G) | Flower |

| Br-14 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Clerodendrum tomentosum* var. *mollissima* | | 1 | 1.25 | Shrub (M) | Flower |
| *Corchorus ?sidoides* subsp. *sidoides* | | 1 | 0.25 | Shrub (M) | Vegetative |
| *Corchorus sidoides* subsp. *sidoides* | | 5 | 0.25 | Shrub (M) | Flower |
| *Corymbia zygophylla* | | 1 | 3.25 | Tree (U) | Vegetative |
| *Crotalaria medicaginea* var. *neglecta* | | 1 | 0.25 | Forb (G) | Flower |
| *Cucumis variabilis* | | 1 | 0.25 | Vine (G) | Vegetative |
| *Denhamia cunninghamii* | | 2 | 1.75 | Shrub (M) | Vegetative |
| *Dodonaea hispidula* var. *arida* | | 2 | 1.75 | Shrub (M) | Fruit |
| *Dolichandrone occidentalis* | | 1 | 1 | Shrub (M) | Vegetative |
| *Ehretia saligna* var. *saligna* | | 1 | 1.75 | Shrub (M) | Vegetative |
| *Eriachne obtusa* | | 10 | 0.5 | Tussock grass (G) | Flower |
| *Euploca leptalea* | | 1 | 0.25 | Forb (G) | Flower |
| *Ficus aculeata* var. *indecora* | | 1 | 2.5 | Tree (U) | Vegetative |
| *Gardenia pyriformis* subsp. *keartlandii* | | 2 | 2 | Shrub (M) | Vegetative |
| *Goodenia panduriformis* | | 1 | 0.5 | Forb (G) | Vegetative |
| *Grevillea refracta* subsp. *refracta* | | 1 | 2.25 | Shrub (M) | Vegetative |
| *Hakea macrocarpa* | | 1 | 2 | Tree (U) | Vegetative |
| *Hybanthus aurantiacus* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Jasminum didymum* subsp. *lineare* | | 1 | 0.5 | Shrub (M) | Vegetative |
| *Lysiphyllum cunninghamii* | | 2 | 3 | Tree (U) | Vegetative |
| *Murdannia graminea* | | 1 | 0.25 | Forb (G) | Flower |
| *Persoonia falcata* | | 1 | 1.75 | Tree (U) | Vegetative |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | P3 | 1 | 0.25 | Forb (G) | Flower |
| *Senna costata* | | 1 | 1 | Shrub (M) | Vegetative |
| *Sida rohlenae* subsp. *occidentalis* | | 1 | 0.25 | Shrub (M) | Flower |
| *Solanum cunninghamii* | | 1 | 0.5 | Shrub (M) | Flower |
| *Spermacoce occidentalis* | | 2 | 0.25 | Forb (G) | Flower |
| *Synostemon lissocarpus* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Tephrosia remotiflora* | | 1 | 0.25 | Forb (G) | Flower |
| *Tinospora smilacina* | | 1 | 0.25 | Vine (G) | Vegetative |
| *Trichodesma zeylanicum* var. *latisepaleum* | | 1 | 0.75 | Shrub (M) | Flower |
| *Triodia caelestialis* | | 60 | 0.5 | Hummock grass (G) | Flower |
| *?Vincetoxicum carnosum* | | 1 | 0.75 | Vine (G) | Vegetative |
| *Waltheria indica* | | 1 | 0.25 | Shrub (M) | Flower |

| Sample ID: Br-R15 | VT05 | Site: F Connection |
|---|---|---|
| **Type:** | Relevé | 50 x 50 m |
| **Date:** | 11/03/2024 | Described by A. Sleep |
| **Coordinates:** | 122.2556524 | -17.8978513 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Orange-brown loam | **Aspect:** | Flat |
| **Drainage:** | Moderate | **Vegetation condition:** | Degraded to completely degraded |
| **Bare ground:** | 2% | **Fire age and intensity:** | 5+ years |
| **Litter cover:** | 20% | **Disturbance:** | Very high: road, weeds & tracks present |



| Br-R15 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia colei* var. *colei* | | 15 | 3 | Tree (U) | Vegetative |
| *Azadirachta indica* | * | 40 | 6 | Tree (U) | Vegetative |
| *Cajanus marmoratus* | | 1 | 0.25 | Vine (G) | Vegetative |
| *Cenchrus biflorus* | * | 85 | 1 | Tussock grass (G) | Fruit |
| *Corymbia polycarpa* | | 10 | 12 | Tree (U) | Flowerbud |
| *Cullen martinii* | | 1 | 0.5 | Shrub (M) | Vegetative |
| *Distimake dissectus* var. *dissectus* | * | 45 | 1.25 | Vine (G) | Vegetative |

| Br-R15 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Ehretia saligna* var. *saligna* | | 2 | 2.25 | Tree (U) | Vegetative |
| *Lysiphyllum cunninghamii* | | 15 | 4 | Tree (U) | Vegetative |
| *Mesosphaerum suaveolens* | * | 60 | 0.75 | Forb (G) | Vegetative |

| Sample ID: Br-16 | VT05 | Site: G |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 07/02/2024 | Described by A. Benkovic |
| **Coordinates:** | 122.2938867 | -17.91025768 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Red sandy clay | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Excellent |
| **Bare ground:** | <2% | **Fire age and intensity:** | Very long unburnt |
| **Litter cover:** | 30% | **Disturbance:** | Negligible |



| Br-16 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia adoxa* var. *subglabra* | | 5 | 0.5 | Shrub (M) | Vegetative |
| *Acacia colei* var. *colei* | | 5 | 5 | Tree (U) | Vegetative |
| *Acacia eriopoda x tumida* var. *tumida* | | 30 | 6 | Tree (U) | Vegetative |
| *?Brachychiton diversifolius* subsp. *diversifolius* | | 2 | 2.5 | Tree (U) | Vegetative |
| *Brachychiton diversifolius* subsp. *diversifolius* | | 1 | 2.5 | Tree (U) | Vegetative |
| *Corchorus ?sidoides* subsp. *sidoides* | | 1 | 0.25 | Shrub (M) | Vegetative |
| *Corymbia greeniana* | | 5 | 7 | Tree (U) | Vegetative |
| *Cucumis variabilis* | | 1 | 0.25 | Vine (G) | Vegetative |
| *Dodonaea hispidula* var. *arida* | | 10 | 1.25 | Shrub (M) | Fruit |

| Br-16 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Dolichandrone occidentalis* | | 6 | 1.25 | Shrub (M) | Vegetative |
| *Ehretia saligna* var. *saligna* | | 1 | 2 | Shrub (M) | Vegetative |
| *Flueggea virosa* subsp. *melanthesoides* | | 1 | 2 | Shrub (M) | Vegetative |
| *Gardenia pyriformis* subsp. *keartlandii* | | 1 | 3.25 | Tree (U) | Vegetative |
| *Jasminum didymum* subsp. *lineare* | | 1 | 1.5 | Shrub (M) | Vegetative |
| *Lysiphyllum cunninghamii* | | 10 | 4.25 | Tree (U) | Vegetative |
| *Persoonia falcata* | | 10 | 3.5 | Tree (U) | Vegetative |
| Poaceae sp. (indet) | | 15 | 0.25 | Tussock grass (G) | Vegetative |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | P3 | 1 | 0.25 | Forb (G) | Vegetative |
| *Pterocaulon ?intermedium* | | 5 | 0.5 | Forb (G) | Vegetative |
| *Solanum cunninghamii* | | 2 | 0.25 | Shrub (M) | Flower |
| *Tinospora smilacina* | | 1 | 0.25 | Vine (G) | Vegetative |
| *Trichodesma zeylanicum* var. *latisepaleum* | | 20 | 1 | Forb (G) | Flower |
| *Triodia ?caelestialis* | | 10 | 0.5 | Hummock Grass (G) | Vegetative |
| *Triodia caelestialis* | | 10 | 0.5 | Hummock Grass (G) | Flower |
| *Waltheria indica* | | 2 | 0.5 | Shrub (M) | Flower |

| Sample ID: Br-17 | VT05 | Site: G |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 07/02/2024 | Described by A. Benkovic |
| **Coordinates:** | 122.2957375 | -17.9154317 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Red sandy clay | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Excellent |
| **Bare ground:** | <2% | **Fire age and intensity:** | Very long unburnt |
| **Litter cover:** | 30% | **Disturbance:** | Negligible |



| Br-17 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia adoxa* var. *subglabra* | | 1 | 0.5 | Shrub (M) | Vegetative |
| *Acacia colei* var. *colei* | | 2 | 2 | Tree (U) | Vegetative |
| *Acacia eriopoda x tumida* var. *tumida* | | 10 | 6 | Tree (U) | Vegetative |
| *Acacia tumida* var. *?kulparn* | | 10 | 2 | Shrub (M) | Vegetative |
| *Afrohybanthus aurantiacus* | | 2 | 5 | Forb (G) | Vegetative |
| *?Brachychiton diversifolius* subsp. *diversifolius* | | 1 | 1.25 | Shrub (M) | Vegetative |
| *Brachychiton diversifolius* subsp. *diversifolius* | | 2 | 3 | Tree (U) | Vegetative |
| *Cajanus marmoratus* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Cassytha capillaris* | | 1 | 0.1 | Vine (G) | Vegetative |

| Br-17 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Corchorus ?sidoides* subsp. *sidoides* | | 1 | 0.25 | Shrub (M) | Vegetative |
| *Corymbia greeniana* | | 10 | 5 | Tree (U) | Vegetative |
| *Corymbia zygophylla* | | 2 | 5 | Tree (U) | Vegetative |
| *Cucumis variabilis* | | 1 | 0.1 | Vine (G) | Vegetative |
| *Denhamia cunninghamii* | | 1 | 2 | Tree (U) | Vegetative |
| *Dodonaea hispidula* var. *arida* | | 5 | 1.5 | Shrub (M) | Fruit |
| *Dolichandrone occidentalis* | | 8 | 2 | Shrub (M) | Vegetative |
| *Ehretia saligna* var. *saligna* | | 2 | 2 | Shrub (M) | Vegetative |
| *Ficus aculeata* var. *indecora* | | 1 | 1 | Shrub (M) | Vegetative |
| *Hakea macrocarpa* | | 1 | 2 | Tree (U) | Vegetative |
| *Lysiphyllum cunninghamii* | | 5 | 3 | Tree (U) | Vegetative |
| *Persoonia falcata* | | 2 | 2 | Tree (U) | Vegetative |
| Poaceae sp. (indet) | | 5 | 1.75 | Tussock grass (G) | Vegetative |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | P3 | 2 | 0.25 | Forb (G) | Vegetative |
| *Premna acuminata* | | 1 | 3 | Tree (U) | Vegetative |
| *Pterocaulon ?intermedium* | | 15 | 1.5 | Forb (G) | Vegetative |
| *Solanum cunninghamii* | | 1 | 0.25 | Shrub (M) | Vegetative |
| *Trichodesma zeylanicum* var. *latisepaleum* | | 5 | 1 | Forb (G) | Flower |
| *Triodia caelestialis* | | 20 | 1.5 | Hummock grass (G) | Vegetative |
| *Waltheria indica* | | 1 | 1 | Shrub (M) | Vegetative |

| Sample ID: Br-18 | VT05 | Site: H |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 08/02/2024 | Described by A. Benkovic |
| **Coordinates:** | 122.3040599 | -17.9301805 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Red sandy clay | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Excellent |
| **Bare ground:** | <2% | **Fire age and intensity:** | Very long unburnt |
| **Litter cover:** | 30% | **Disturbance:** | Negligible |



| Br-18 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia colei var. colei* | | 10 | 5 | Tree (U) | Vegetative |
| *Acacia eriopoda x tumida* var. *tumida* | | 10 | 3 | Tree (U) | Vegetative |
| *Acacia platycarpa* | | 5 | 5 | Tree (U) | Vegetative |
| *?Aristida* sp. (indet) | | 5 | 0.5 | Tussock grass (G) | Vegetative |
| *Brachychiton diversifolius* subsp. *diversifolius* | | 5 | 3 | Tree (U) | Vegetative |
| *Cassytha capillaris* | | 1 | 0.1 | Vine (G) | Vegetative |
| *Corchorus ?sidoides* subsp. *sidoides* | | 1 | 0.25 | Shrub (M) | Vegetative |
| *Corymbia ?flavescens* | | 5 | 10 | Tree (U) | Vegetative |
| *Corymbia greeniana* | | 1 | 10 | Tree (U) | Vegetative |

| Br-18 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Corymbia zygophylla* | | 5 | 10 | Tree (U) | Vegetative |
| *Denhamia cunninghamii* | | 1 | 2 | Shrub (M) | Vegetative |
| *Dodonaea hispidula* var. *arida* | | 15 | 1.5 | Shrub (M) | Vegetative |
| *Ficus aculeata* var. *indecora* | | 1 | 2 | Tree (U) | Vegetative |
| *Flueggea virosa* subsp. *melanthesoides* | | 1 | 2 | Tree (U) | Fruit |
| *Gyrostemon tepperi* | | 1 | 1 | Shrub (M) | Vegetative |
| *Lysiphyllum cunninghamii* | | 5 | 3 | Tree (U) | Vegetative |
| *Persoonia falcata* | | 2 | 2 | Tree (U) | Vegetative |
| Poaceae sp. (indet) | | 3 | 0.5 | Tussock grass (G) | Vegetative |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | P3 | 1 | 0.25 | Forb (G) | Vegetative |
| *Pterocaulon ?intermedium* | | 20 | 1.5 | Forb (G) | Vegetative |
| *Sida rohlenae* subsp. *occidentalis* | | 1 | 0.1 | Shrub (M) | Flower |
| *Solanum cunninghamii* | | 2 | 1 | Shrub (M) | Flower |
| *Spermacoce occidentalis* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Trichodesma zeylanicum* var. *latisepaleum* | | 10 | 1.5 | Forb (G) | Flower |
| *Triodia ?caelestialis* | | 2 | 0.5 | Hummock grass (G) | Vegetative |
| *Triodia caelestialis* | | 20 | 1.5 | Hummock grass (G) | Vegetative |
| *Waltheria indica* | | 2 | 1 | Shrub (M) | Vegetative |

| Sample ID: Br-19 | VT05 | Site: H |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 09/02/2024 | Described by A. Benkovic |
| **Coordinates:** | 122.2957432 | -17.9260178 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Red sandy clay | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Excellent |
| **Bare ground:** | <2% | **Fire age and intensity:** | Very long unburnt |
| **Litter cover:** | 30% | **Disturbance:** | Negligible |



| Br-19 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia eriopoda x tumida var. tumida* | | 10 | 5 | Tree (U) | Vegetative |
| *Acacia platycarpa* | | 1 | 2 | Tree (U) | Vegetative |
| *Afrohybanthus aurantiacus* | | 1 | 0.25 | Forb (G) | Vegetative |
| *?Aristida sp. (indet)* | | 5 | 1 | Tussock grass (G) | Vegetative |
| *Azadirachta indica* | * | 1 | 2 | Tree (U) | Vegetative |
| *?Bonamia oblongifolia* | P3 | 1 | 0.25 | Forb (G) | Vegetative |
| *Corchorus ?sidoides* subsp. *sidoides* | | 1 | 0.25 | Shrub (M) | Vegetative |
| *Corymbia greeniana* | | 1 | 7 | Tree (U) | Vegetative |
| *Corymbia zygophylla* | | 2 | 5 | Tree (U) | Vegetative |

| Br-19 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Dolichandrone occidentalis* | | 2 | 2 | Shrub (M) | Vegetative |
| *Eragrostis eriopoda* | | 2 | 0.5 | Tussock grass (G) | Vegetative |
| *Ficus aculeata* var. *indecora* | | 1 | 1.75 | Tree (U) | Vegetative |
| *Grevillea pyramidalis* subsp. *pyramidalis* | | 1 | 2 | Tree (U) | Vegetative |
| *Gyrocarpus americanus* subsp. *pachyphyllus* | | 3 | 8 | Tree (U) | Vegetative |
| *Hakea macrocarpa* | | 1 | 2 | Tree (U) | Vegetative |
| *Jasminum didymum* subsp. *lineare* | | 1 | 1.75 | Shrub (M) | Vegetative |
| *Lysiana spathulata* subsp. *spathulata* | | 1 | 2 | Shrub (M) | Flower |
| *Lysiphyllum cunninghamii* | | 5 | 5 | Tree (U) | Vegetative |
| *Persoonia falcata* | | 10 | 2 | Tree (U) | Vegetative |
| *Planchonia careya* | | 1 | 5 | Tree (U) | Vegetative |
| Poaceae sp. (indet) | | 5 | 1.5 | Tussock grass (G) | Vegetative |
| *Pterocaulon ?intermedium* | | 20 | 1.5 | Forb (G) | Vegetative |
| *Sida rohlenae* subsp. *occidentalis* | | 2 | 0.25 | Shrub (M) | Flower |
| *Solanum cunninghamii* | | 1 | 0.5 | Shrub (M) | Flower |
| *Spermacoce occidentalis* | | 1 | 0.1 | Tree (U) | Vegetative |
| *Tephrosia crocea* | | 1 | 0.25 | Forb (G) | Flower |
| *Trichodesma zeylanicum* var. *latisepaleum* | | 20 | 1.5 | Forb (G) | Flower |
| *Triodia ?caelestialis* | | 2 | 0.5 | Hummock grass (G) | Vegetative |
| *Triodia caelestialis* | | 20 | 1.5 | Hummock grass (G) | Flower |
| *Ventilago viminalis* | | 1 | 3 | Tree (U) | Vegetative |
| *Waltheria indica* | | 2 | 1 | Shrub (M) | Vegetative |

| Sample ID: Br-20 | VT05 | Site: F |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 07/03/2024 | Described by A. Benkovic |
| **Coordinates:** | 122.2808558 | -17.8634810 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Red sandy clay | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Excellent |
| **Bare ground:** | <2% | **Fire age and intensity:** | 5-10 years |
| **Litter cover:** | 10% | **Disturbance:** | Negligible |



| Br-20 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia adoxa* var. *subglabra* | | 15 | 1.5 | Shrub (M) | Vegetative |
| *Acacia colei* var. *colei* | | 10 | 2 | Tree (U) | Vegetative |
| *Acacia eriopoda x tumida* var. *tumida* | | 40 | 3 | Tree (U) | Vegetative |
| *Afrohybanthus aurantiacus* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Brachychiton diversifolius* subsp. *diversifolius* | | 1 | 3 | Tree (U) | Vegetative |
| *Cajanus marmoratus* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Carissa lanceolata* | | 2 | 1.25 | Shrub (M) | Vegetative |
| *Chrysopogon pallidus* | | 15 | 1 | Tussock grass (G) | Flower |

| Br-20 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Corchorus sidoides* subsp. *sidoides* | | 2 | 0.25 | Shrub (M) | Flower |
| *Corymbia greeniana* | | 1 | 4 | Tree (U) | Vegetative |
| *Corymbia zygophylla* | | 1 | 3 | Tree (U) | Vegetative |
| *Denhamia cunninghamii* | | 1 | 1.75 | Shrub (M) | Vegetative |
| *Dolichandrone occidentalis* | | 2 | 1.75 | Shrub (M) | Vegetative |
| *Ehretia saligna* var. *saligna* | | 5 | 2 | Shrub (M) | Vegetative |
| *Ficus aculeata* var. *indecora* | | 2 | 1.75 | Shrub (M) | Vegetative |
| *Glycine tomentella* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Grevillea pyramidalis* subsp. *pyramidalis* | | 1 | 2 | Tree (U) | Vegetative |
| *Gymnema erectum* | | 1 | 0.5 | Shrub (M) | Flower |
| *Jacquemontia* sp. Broome (A.A. Mitchell 3028) | P1 | 1 | 0.25 | Forb (G) | Flower |
| Poaceae sp. (indet) | | 10 | 0.75 | Tussock grass (G) | Vegetative |
| *Premna acuminata* | | 2 | 3 | Tree (U) | Flower |
| *Triodia caelestialis* | | 40 | 1.5 | Hummock grass (G) | Flower |
| *Ventilago viminalis* | | 1 | 1.75 | Shrub (M) | Vegetative |
| *Waltheria indica* | | 5 | 1.75 | Shrub (M) | Flower |

| Sample ID: Br-21 | VT05 | Site: F |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 07/03/2024 | Described by A. Benkovic |
| **Coordinates:** | 122.2818304 | -17.8671429 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Red sandy clay | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Excellent |
| **Bare ground:** | <2% | **Fire age and intensity:** | 5-10 years |
| **Litter cover:** | 30% | **Disturbance:** | Negligible |



| Br-21 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia adoxa* var. *subglabra* | | 15 | 1.25 | Shrub (M) | Vegetative |
| *Acacia colei* var. *colei* | | 4 | 2 | Tree (U) | Vegetative |
| *Acacia eriopoda* | | 40 | 5 | Tree (U) | Vegetative |
| *Acacia tumida* | | 3 | 4 | Tree (U) | Vegetative |
| *Acacia tumida* var. *kulparn* | | 3 | 2.5 | Shrub (M) | Vegetative |
| *Brachychiton diversifolius* subsp. *diversifolius* | | 1 | 2 | Tree (U) | Vegetative |
| *Carissa lanceolata* | | 2 | 1.75 | Shrub (M) | Vegetative |
| *Chrysopogon pallidus* | | 10 | 1.75 | Tussock grass (G) | Flower |
| *Corchorus sidoides* subsp. *sidoides* | | 3 | 0.25 | Shrub (M) | Flower |

| Br-21 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Corymbia greeniana* | | 1 | 4 | Tree (U) | Vegetative |
| *Corymbia zygophylla* | | 1 | 4 | Tree (U) | Vegetative |
| *Cucumis variabilis* | | 1 | 0.1 | Vine (G) | Vegetative |
| *Denhamia cunninghamii* | | 3 | 2 | Shrub (M) | Vegetative |
| *?Digitaria brownii* | | 2 | 0.5 | Tussock grass (G) | Vegetative |
| *Dolichandrone occidentalis* | | 5 | 2 | Shrub (M) | Vegetative |
| *Ehretia saligna* var. *saligna* | | 5 | 2 | Shrub (M) | Vegetative |
| *Ficus aculeata* var. *indecora* | | 2 | 1.5 | Shrub (M) | Vegetative |
| *Gardenia pyriformis* subsp. *keartlandii* | | 3 | 1.75 | Shrub (M) | Flower |
| *Gossypium australe* | | 5 | 1.75 | Shrub (M) | Vegetative |
| *Grevillea pyramidalis* subsp. *pyramidalis* | | 2 | 2 | Tree (U) | Vegetative |
| *Hakea macrocarpa* | | 1 | 2.5 | Tree (U) | Vegetative |
| Poaceae sp. (indet) | | 10 | 1 | Tussock grass (G) | Vegetative |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | P3 | 1 | 0.25 | Forb (G) | Vegetative |
| *Solanum* sp. (indet) | | 1 | 0.5 | Shrub (M) | Vegetative |
| *Tinospora smilacina* | | 1 | 0.25 | Vine (G) | Vegetative |
| *Trichodesma zeylanicum* var. *latisepaleum* | | 1 | 1 | Forb (G) | Flower |
| *Triodia caelestialis* | | 30 | 1.5 | Hummock grass (G) | Flower |
| *Waltheria indica* | | 5 | 1.5 | Shrub (M) | Flower |

**Derby quadrat/releve data**

| Sample ID: De-01 | VT02 | Site: P |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 19/03/2024 | Described by J. Collins |
| **Coordinates:** | 123.6923669 | -17.36243727 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Light brown sand | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Very good |
| **Bare ground:** | 11-30% | **Fire age and intensity:** | Recent: 0-2 years |
| **Litter cover:** | 2-10% | **Disturbance:** | Recent fire |



| De-01 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Abutilon hannii* | | 1 | 0.25 | Forb (G) | Flower |
| *Acacia tumida* var. *kulparn* | | 3 | 1.75 | Shrub (M) | Vegetative |
| *Adansonia gregorii* | | 2 | 5 | Tree (U) | Vegetative |
| *Alstonia linearis* | | 1 | 1.25 | Shrub (M) | Flower |
| *Aristida hygrometrica* | | 5 | 1.25 | Tussock grass (G) | Immature fruit |
| *Arivela viscosa* | | 20 | 0.25 | Forb (G) | Flower |
| *Brachychiton diversifolius* subsp. *diversifolius* | | 3 | 5 | Shrub (M) | Vegetative |

| De-01 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Bulbostylis barbata* | | 1 | 0.1 | Sedge (G) | Fruit |
| *Chrysopogon fallax* | | 50 | 1 | Tussock grass (G) | Flower |
| *Dodonaea hispidula* | | 2 | 1.5 | Shrub (M) | Fruit |
| *Eriachne obtusa* | | 5 | 1 | Tussock grass (G) | Fruit/Flower |
| *Euphorbia coghlanii* | | 1 | 0.1 | Forb (G) | Fruit |
| *Evolvulus alsinoides* subsp. *villosicalyx* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Grevillea pyramidalis* subsp. *pyramidalis* | | 2 | 1.75 | Shrub (M) | Vegetative |
| *Gyrocarpus americanus* subsp. *americanus* | | 2 | 2 | Shrub (M) | Vegetative |
| *Hibiscus austrinus* | | 1 | 1 | Shrub (M) | Flower |
| *Kirganelia baccata* | | 2 | 2 | Shrub (M) | Vegetative |
| *Lysiphyllum cunninghamii* | | 1 | 4 | Tree (U) | Vegetative |
| *Melhania oblongifolia* | | 4 | 0.25 | Forb (G) | Vegetative |
| *Microstachys chamaelea* | | 1 | 0.1 | Forb (G) | Immature fruit |
| *Murdannia graminea* | | 1 | 0.25 | Forb (G) | Flowerbud |
| *Portulaca* sp. (indet) | | 1 | 0.1 | Forb (G) | Flower |
| *Pterocaulon* sp. (indet) | | 1 | 0.25 | Forb (G) | Vegetative |
| *Terminalia canescens* | | 3 | 2 | Shrub (M) | Vegetative |
| *Trianthema pilosum* | | 2 | 0.1 | Forb (G) | Flower |
| *Tribulopis angustifolia* | | 2 | 0.25 | Forb (G) | Flower |
| *Trichodesma zeylanicum* var. *latisepaleum* | | 3 | 0.75 | Forb (G) | Vegetative |
| *Waltheria indica* | | 2 | 0.25 | Forb (G) | Vegetative |
| *Zornia chaetophora* | | 1 | 0.25 | Forb (G) | Flower |

| Sample ID: De-R01 | VT02 | Connection Route |
|---|---|---|
| **Type:** | Relevé | 50 x 50 m |
| **Date:** | 23/03/2024 | Described by J. Collins |
| **Coordinates:** | 123.6793557 | -17.37353873 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Light brown sandy loam | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Degraded |
| **Bare ground:** | 2-10% | **Fire age and intensity:** | Moderate: 3-5 years |
| **Litter cover:** | 2-10% | **Disturbance:** | Road clearing |



| De-R01 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia tumida* var. *kulparn* | | 2 | 4 | Shrub (M) | Vegetative |
| *Adansonia gregorii* | | 2 | 12 | Tree (U) | Vegetative |
| *Aristida hygrometrica* | | 25 | 1.25 | Tussock grass (G) | Immature fruit |
| *Azadirachta indica* | * | 4 | 4 | Shrub (M) | Vegetative |
| *Chrysopogon fallax* | | 5 | 1.25 | Tussock grass (G) | Flower |
| *Corymbia dichromophloia* | | 1 | 12 | Tree (U) | Fruit |
| *Corymbia* sp. (indet) | | 2 | 12 | Tree (U) | Fruit |
| *Eriachne obtusa* | | 3 | 1 | Tussock grass (G) | Fruit |
| *Hakea arborescens* | | 2 | 4 | Tree (U) | Flower |

| De-R01 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Lysiphyllum cunninghamii* | | 1 | 4 | Tree (U) | Vegetative |
| *Melhania oblongifolia* | | 4 | 0.25 | Forb (G) | Vegetative |
| *Trichodesma zeylanicum* var. *latisepaleum* | | 3 | 0.75 | Forb (G) | Vegetative |

| Site ID: De-02 | VT04 | Site: D |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 20/03/2024 | Described by J. Collins |
| **Coordinates:** | 123.6738757 | -17.33586041 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Light orange-brown sandy loam | **Aspect:** | South |
| **Drainage:** | Good | **Vegetation condition:** | Very good |
| **Bare ground:** | 2-10% | **Fire age and intensity:** | Old: 6+ years |
| **Litter cover:** | 11-30% | **Disturbance:** | Gravel pits present |



| De-02 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia colei* var. *colei* | | 5 | 7 | Shrub (M) | Dehisced fruit |
| *Acacia monticola* | | 2 | 3.5 | Shrub (M) | Vegetative |
| *Acacia tumida* var. *kulparn* | | 1 | 2 | Shrub (M) | Vegetative |
| *Alstonia linearis* | | 2 | 2 | Shrub (M) | Vegetative |
| *Aristida* sp. (indet) | | 35 | 0.5 | Tussock grass (G) | Dehisced fruit |
| *Azadirachta indica* | * | 4 | 9 | Shrub (M) | Vegetative |
| *Brachychiton diversifolius* subsp. *diversifolius* | | 2 | 3 | Shrub (M) | Vegetative |
| *Calotropis gigantea* | * | 1 | 0.25 | Forb (G) | Dehisced fruit |

| De-02 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Calytrix exstipulata* | | 40 | 3 | Shrub (M) | Vegetative |
| *Corymbia dichromophloia* | | 5 | 12 | Tree (U) | Fruit |
| *Cynanchum floribundum* | | 1 | 0.25 | Vine (G) | Vegetative |
| *Dodonaea hispidula* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Ehretia saligna* var. *saligna* | | 10 | 4 | Shrub (M) | Vegetative |
| *Flueggea virosa* subsp. *melanthesoides* | | 35 | 1.75 | Shrub (M) | Fruit |
| *Gyrocarpus americanus* subsp. *americanus* | | 4 | 7 | Tree (U) | Vegetative |
| *Hakea arborescens* | | 25 | 4 | Tree (U) | Flower |
| *Hakea macrocarpa* | | 10 | 4.5 | Tree (U) | Fruit |
| *Lysiphyllum cunninghamii* | | 1 | 4 | Tree (U) | Vegetative |
| *Melhania oblongifolia* | | 4 | 0.25 | Forb (G) | Vegetative |
| *Pterocaulon* sp. (indet) | | 1 | 0.1 | Forb (G) | Vegetative |
| *Santalum lanceolatum* | | 2 | 2.75 | Shrub (M) | Vegetative |
| *Solanum cunninghamii* | | 1 | 0.25 | Forb (G) | Flower |
| *Terminalia canescens* | | 15 | 2 | Shrub (M) | Vegetative |
| *Tinospora smilacina* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Tribulopis angustifolia* | | 2 | 0.25 | Forb (G) | Flower |
| *Waltheria indica* | | 1 | 0.25 | Forb (G) | Vegetative |

| Sample ID: De-R02 | VT04 | Site: O / Connection Route |
|---|---|---|
| **Type:** | Relevé | 50 x 50 m |
| **Date:** | 24/03/2024 | Described by J. Collins |
| **Coordinates:** | 123.6476161 | -17.31261383 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Light brown silty loam | **Aspect:** | Flat |
| **Drainage:** | Poor | **Vegetation condition:** | Degraded |
| **Bare ground:** | <2% | **Fire age and intensity:** | Old: 6+ years |
| **Litter cover:** | <2% | **Disturbance:** | High: weeds, tracks, road clearing, drain & rubbish present |



| De-R02 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia monticola* | | 4 | 3 | Shrub (M) | Dehisced fruit |
| *Acacia plectocarpa* subsp. *plectocarpa* | | 1 | 1.75 | Shrub (M) | Vegetative |
| *Acacia tumida* var. *kulparn* | | 5 | 3 | Shrub (M) | Vegetative |
| *Cenchrus ciliaris* | * | 15 | 1.25 | Tussock grass (G) | Fruit |
| *Corymbia zygophylla* | | 2 | 12 | Tree (U) | Fruit |
| *Distimake dissectus* var. *dissectus* | * | 1 | 1.5 | Vine (G) | Vegetative |
| *Eriachne obtusa* | | 80 | 0.5 | Tussock grass (G) | Flower |

| De-R02 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Lysiphyllum cunninghamii* | | 4 | 6 | Tree (U) | Vegetative |
| *Neptunia scutata* | | 2 | 0.1 | Forb (G) | Flower |
| *Ocimum basilicum* | * | 20 | 1 | Forb (G) | Flower |
| *Stylosanthes hamata* | * | 4 | 0.25 | Forb (G) | Flower |

| Sample ID: De-03 | VT03 | Site: C |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 20/03/2024 | Described by J. Collins |
| **Coordinates:** | 123.661725 | -17.33882052 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Light brown silty loam | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Very good |
| **Bare ground:** | 11-30% | **Fire age and intensity:** | Old: 6+ years |
| **Litter cover:** | 11-30% | **Disturbance:** | Tracks present |



| De-03 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia colei* var. *colei* | | 10 | 5 | Shrub (M) | Dehisced fruit |
| *Adansonia gregorii* | | 10 | 8 | Tree (U) | Vegetative |
| *Aristida* sp. (indet) | | 1 | 0.5 | Tussock grass (G) | Dehisced fruit |
| *Azadirachta indica* | * | 20 | 9 | Shrub (M) | Vegetative |
| *Calytrix exstipulata* | | 3 | 3 | Shrub (M) | Vegetative |
| *Cyperus pulchellus* | | 1 | 0.1 | Sedge (G) | Flower |
| *Drosera derbyensis* | | 1 | 0.1 | Forb (G) | Flower |
| *Eriachne obtusa* | | 20 | 0.25 | Other grass (G) | Flower |
| *Evolvulus alsinoides* subsp. *villosicalyx* | | 1 | 0.1 | Forb (G) | Vegetative |

| De-03 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Ficus tinctoria* | | 20 | 4 | Shrub (M) | Vegetative |
| *Flueggea virosa* subsp. *melanthesoides* | | 40 | 1.75 | Shrub (M) | Fruit |
| *Grevillea pyramidalis* subsp. *pyramidalis* | | 4 | 4 | Tree (U) | Vegetative |
| *Hakea arborescens* | | 40 | 6 | Tree (U) | Flower |
| *Lysiphyllum cunninghamii* | | 1 | 3 | Tree (U) | Vegetative |
| *Melaleuca cajuputi* subsp. *cajuputi* | | 5 | 3 | Shrub (M) | Fruit |
| *Pterocaulon* sp. (indet) | | 1 | 0.1 | Forb (G) | Vegetative |
| *Terminalia canescens* | | 20 | 4 | Shrub (M) | Vegetative |

| Sample ID: De-04 | VT04 | Site: C |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 20/03/2024 | Described by J. Collins |
| **Coordinates:** | 123.6597203 | -17.33360248 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Light brown sandy loam | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Very good |
| **Bare ground:** | 2-10% | **Fire age and intensity:** | Old: 6+ years |
| **Litter cover:** | 31-70% | **Disturbance:** | Tracks present |



| De-04 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Abutilon leucopetalum* | | 3 | 0.25 | Shrub (M) | Immature fruit |
| *Acacia tumida* var. *kulparn* | | 15 | 7 | Shrub (M) | Vegetative |
| *Adansonia gregorii* | | 10 | 8 | Tree (U) | Vegetative |
| *Atalaya hemiglauca* | | 1 | 1.5 | Shrub (M) | Vegetative |
| *Azadirachta indica* | * | 5 | 5 | Shrub (M) | Vegetative |
| *Bidens bipinnata* | * | 1 | 0.1 | Forb (G) | Vegetative |
| *Brachychiton diversifolius* subsp. *diversifolius* | | 2 | 3 | Shrub (M) | Vegetative |
| *Bulbostylis barbata* | | 1 | 0.1 | Sedge (G) | Fruit |
| *?Calytrix* sp. (indet) | | 2 | 0.25 | Shrub (M) | Vegetative |

| De-04 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Corymbia dichromophloia* | | 10 | 12 | Tree (U) | Vegetative |
| *Cynanchum floribundum* | | 1 | 0.25 | Vine (G) | Vegetative |
| *Evolvulus alsinoides* subsp. *villosicalyx* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Flueggea virosa* subsp. *melanthesoides* | | 25 | 2 | Shrub (M) | Fruit |
| *Gyrocarpus americanus* subsp. *americanus* | | 1 | 2.75 | Tree (U) | Vegetative |
| *Lysiandra ?arida* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Lysiphyllum cunninghamii* | | 2 | 3 | Tree (U) | Vegetative |
| *Melaleuca cajuputi* subsp. *cajuputi* | | 80 | 3 | Shrub (M) | Fruit |
| *Melhania oblongifolia* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Murdannia graminea* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Planchonia careya* | | 2 | 2 | Shrub (M) | Dehisced fruit |
| Poaceae sp. (indet) | | 1 | 0.25 | Other grass (G) | Vegetative |
| *Pterocaulon* sp. (indet) | | 1 | 0.1 | Forb (G) | Vegetative |
| *Ptilotus lanatus* | | 1 | 0.25 | Forb (G) | Flowerbud |
| *Senna costata* | | 1 | 1.25 | Shrub (M) | Vegetative |
| *Solanum cunninghamii* | | 1 | 0.25 | Forb (G) | Flower |
| *Terminalia canescens* | | 2 | 1.5 | Shrub (M) | Vegetative |
| *Tinospora smilacina* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Trichodesma zeylanicum* var. *latisepaleum* | | 1 | 0.25 | Forb (G) | Vegetative |

| Sample ID: De-05 | VT04 | Site: I |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 21/03/2024 | Described by J. Collins |
| **Coordinates:** | 123.6721037 | -17.35498358 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Light brown pindan sandy loam | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Very good |
| **Bare ground:** | 2-10% | **Fire age and intensity:** | Old: 6+ years |
| **Litter cover:** | 11-30% | **Disturbance:** | Some weeds present |



| De-05 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia tumida* var. *kulparn* | | 40 | 8 | Shrub (M) | Vegetative |
| *Adansonia gregorii* | | 5 | 8 | Tree (U) | Vegetative |
| *Alstonia linearis* | | 2 | 4 | Shrub (M) | Vegetative |
| *Aristida* sp. (indet) | | 10 | 0.5 | Tussock grass (G) | Dehisced fruit |
| *Azadirachta indica* | * | 5 | 5 | Shrub (M) | Vegetative |
| *Bulbostylis barbata* | | 1 | 0.1 | Sedge (G) | Fruit |
| *Calotropis gigantea* | * | 1 | 3 | Shrub (M) | Vegetative |
| *Calytrix exstipulata* | | 5 | 3 | Shrub (M) | Vegetative |

| De-05 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Chrysopogon fallax* | | 2 | 1 | Tussock grass (G) | Dehisced fruit |
| *Corymbia* sp. (indet) | | 4 | 10 | Tree (U) | Vegetative |
| *Evolvulus alsinoides* subsp. *villosicalyx* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Flueggea virosa* subsp. *melanthesoides* | | 20 | 2 | Shrub (M) | Fruit |
| *Grevillea pyramidalis* subsp. *pyramidalis* | | 10 | 8 | Shrub (M) | Vegetative |
| *Hakea arborescens* | | 5 | 6 | Tree (U) | Flower |
| *Lysiandra ?arida* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Lysiphyllum cunninghamii* | | 10 | 7 | Tree (U) | Vegetative |
| *Melaleuca cajuputi* subsp. *cajuputi* | | | | | |
| *Melhania oblongifolia* | | 2 | 0.25 | Forb (G) | Dehisced fruit |
| *Portulaca* sp. (indet) | | 1 | 0.1 | Forb (G) | Flower |
| *Pterocaulon* sp. (indet) | | 1 | 0.1 | Forb (G) | Vegetative |
| *Ptilotus lanatus* | | 1 | 0.25 | Forb (G) | Flowerbud |
| *Solanum cunninghamii* | | 3 | 0.25 | Forb (G) | Flower |
| *Tribulopis angustifolia* | | 1 | 0.25 | Forb (G) | Flower |
| *Vigna lanceolata* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Waltheria indica* | | 1 | 0.25 | Forb (G) | Vegetative |

| Sample ID: De-06 | VT04 | Site: D |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 21/03/2024 | Described by J. Collins |
| **Coordinates:** | 123.6650546 | -17.33489740 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Light orange-brown sandy loam | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Very good |
| **Bare ground:** | 11-30% | **Fire age and intensity:** | Old: 6+ years |
| **Litter cover:** | 11-30% | **Disturbance:** | Tracks present |



| De-06 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia colei* var. *colei* | | 1 | 5 | Shrub (M) | Dehisced fruit |
| *Acacia monticola* | | 4 | 3.5 | Shrub (M) | Vegetative |
| *Adansonia gregorii* | | 10 | 8 | Tree (U) | Vegetative |
| *Alstonia linearis* | | 2 | 4 | Shrub (M) | Vegetative |
| *Bidens bipinnata* | * | 1 | 0.1 | Forb (G) | Vegetative |
| *Bulbostylis barbata* | | 1 | 0.1 | Sedge (G) | Fruit |
| *Calytrix exstipulata* | | 40 | 3 | Shrub (M) | Vegetative |
| *?Calytrix* sp. (indet) | | 2 | 0.25 | Shrub (M) | Vegetative |

| De-06 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Cochlospermum fraseri* | | 3 | 1.75 | Shrub (M) | Dehisced fruit |
| *Corymbia dichromophloia* | | 3 | 10 | Tree (U) | Fruit |
| *Corymbia zygophylla* | | 5 | 12 | Tree (U) | Fruit |
| *Euploca diversifolia* | | 1 | 0.25 | Forb (G) | Flower |
| *Flueggea virosa* subsp. *melanthesoides* | | 25 | 2 | Shrub (M) | Fruit |
| *Grevillea pyramidalis* subsp. *pyramidalis* | | 2 | 1.75 | Shrub (M) | Vegetative |
| *Lysiandra ?arida* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Melhania oblongifolia* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Murdannia graminea* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Santalum lanceolatum* | | 2 | 2.75 | Shrub (M) | Vegetative |
| *Solanum cunninghamii* | | 1 | 0.25 | Forb (G) | Flower |
| *Terminalia canescens* | | 2 | 2 | Shrub (M) | Vegetative |
| *Tinospora smilacina* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Triodia caelestialis* | | 25 | 0.5 | Hummock grass (G) | Dehisced fruit |
| *Waltheria indica* | | 1 | 0.25 | Forb (G) | Vegetative |

| Sample ID: De-07 | VTVT04 | Site: O |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 21/03/2024 | Described by J. Collins |
| **Coordinates:** | 123.6616963 | -17.31574262 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Light brown pindan silty loam | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Very good |
| **Bare ground:** | 2-10% | **Fire age and intensity:** | Old: 6+ years |
| **Litter cover:** | 11-30% | **Disturbance:** | Occasional weeds present |



| De-07 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia monticola* | | 70 | 4 | Shrub (M) | Dehisced fruit |
| *Acacia plectocarpa* subsp. *plectocarpa* | | 3 | 3 | Shrub (M) | Vegetative |
| *Acacia tumida* var. *kulparn* | | 20 | 4 | Shrub (M) | Vegetative |
| *Adansonia gregorii* | | 25 | 8 | Tree (U) | Vegetative |
| *Alstonia linearis* | | 1 | 4 | Shrub (M) | Vegetative |
| *Azadirachta indica* | * | 5 | 7 | Shrub (M) | Vegetative |
| *Bidens bipinnata* | * | 1 | 0.1 | Forb (G) | Vegetative |
| *Boerhavia coccinea* | Mixed | 1 | 0.1 | Forb (G) | Vegetative |

| De-07 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Calotropis gigantea* | * | 1 | 3 | Shrub (M) | Vegetative |
| *Calytrix exstipulata* | | 1 | 1 | Shrub (M) | Vegetative |
| *?Calytrix* sp. (indet) | | 2 | 0.25 | Shrub (M) | Vegetative |
| *Capparis lasiantha* | | 1 | 1.25 | Shrub (M) | Vegetative |
| *Cynanchum floribundum* | | 1 | 0.25 | Vine (G) | Vegetative |
| *Dodonaea hispidula* | | 1 | 1.5 | Shrub (M) | Fruit |
| *Flueggea virosa* subsp. *melanthesoides* | | 10 | 3 | Shrub (M) | Fruit |
| *Grevillea pyramidalis* subsp. *pyramidalis* | | 2 | 1.75 | Shrub (M) | Vegetative |
| *Hakea arborescens* | | 1 | 2 | Shrub (M) | Vegetative |
| *Lysiandra ?arida* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Lysiphyllum cunninghamii* | | 2 | 1.25 | Tree (U) | Vegetative |
| *Melhania oblongifolia* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Planchonia careya* | | 2 | 7 | Tree (U) | Flower |
| *Pterocaulon* sp. (indet) | | 1 | 0.1 | Forb (G) | Vegetative |
| *Rhynchosia minima* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Solanum cunninghamii* | | 1 | 0.25 | Forb (G) | Flower |
| *Terminalia canescens* | | 3 | 3 | Shrub (M) | Vegetative |
| *Trichodesma zeylanicum* var. *latisepaleum* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Triodia caelestialis* | | 1 | 0.5 | Hummock grass (G) | Dehisced fruit |
| *Waltheria indica* | | 1 | 0.25 | Forb (G) | Vegetative |

| Sample ID: De-08 | VT08 | Site: P |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 22/03/2024 | Described by J. Collins |
| **Coordinates:** | 123.6866278 | -17.37342085 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Light brown pindan sand | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Very good |
| **Bare ground:** | 11-30% | **Fire age and intensity:** | Recent: 0-2 years |
| **Litter cover:** | 2-10% | **Disturbance:** | Occasional weeds present |



| De-08 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia tumida* var. *kulparn* | | 3 | 6 | Shrub (M) | Vegetative |
| *Adansonia gregorii* | | 1 | 8 | Tree (U) | Vegetative |
| *Alstonia linearis* | | 6 | 0.5 | Shrub (M) | Flower |
| *Aristida hygrometrica* | | 20 | 0.25 | Tussock grass (G) | Immature fruit |
| *Arivela viscosa* | | 25 | 0.5 | Forb (G) | Flower |
| *Boerhavia coccinea* | Mixed | 1 | 0.1 | Forb (G) | Vegetative |
| *Bulbostylis barbata* | | 1 | 0.1 | Sedge (G) | Fruit |
| *Cenchrus setiger* | * | 4 | 0.5 | Tussock grass (G) | Fruit |
| *Chrysopogon fallax* | | 50 | 1 | Tussock grass (G) | Flower |

| De-08 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Corymbia zygophylla* | | 2 | 15 | Tree (U) | Fruit |
| *Cynanchum floribundum* | | 1 | 1.25 | Vine (G) | Vegetative |
| *Eriachne ciliata* | | 2 | 0.25 | Tussock grass (G) | Fruit |
| *Evolvulus alsinoides* subsp. *villosicalyx* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Fimbristylis tetragona* | | 2 | 0.25 | Sedge (G) | Fruit |
| *Goodenia heppleana* | | 1 | 0.1 | Forb (G) | Flower |
| *Gossypium australe* | | 2 | 0.5 | Forb (G) | Vegetative |
| *Hibiscus austrinus* | | 2 | 0.25 | Forb (G) | Flowerbud |
| *Lysiandra ?arida* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Microstachys chamaelea* | | 1 | 0.1 | Forb (G) | Immature fruit |
| *Murdannia graminea* | | 1 | 0.25 | Forb (G) | Flower |
| *Panicum majusculum* | | 10 | 0.25 | Tussock grass (G) | Fruit |
| *Solanum cunninghamii* | | 1 | 0.25 | Forb (G) | Flower |
| *Spermacoce occidentalis* | | 1 | 0.25 | Forb (G) | Flower |
| *Tinospora smilacina* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Trianthema pilosum* | | 2 | 0.1 | Forb (G) | Flower |
| *Trichodesma zeylanicum* var. *latisepaleum* | | 2 | 0.75 | Forb (G) | Vegetative |

| Sample ID: De-09 | VT02 | Site: P |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 22/03/2024 | Described by J. Collins |
| **Coordinates:** | 123.6991387 | -17.36656308 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Light brown pindan sand | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Very good |
| **Bare ground:** | 11-30% | **Fire age and intensity:** | Old: 6+ years |
| **Litter cover:** | 2-10% | **Disturbance:** | Minimal |



| De-09 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Abutilon hannii* | | 2 | 0.5 | Forb (G) | Flower |
| *Acacia tumida* var. *kulparn* | | 3 | 6 | Shrub (M) | Vegetative |
| *Adansonia gregorii* | | 5 | 10 | Tree (U) | Vegetative |
| *Arivela viscosa* | | 3 | 0.5 | Forb (G) | Flower |
| *Azadirachta indica* | * | 2 | 8 | Shrub (M) | Vegetative |
| *Boerhavia coccinea* | Mixed | 1 | 0.1 | Forb (G) | Vegetative |
| *Brachychiton diversifolius* subsp. *diversifolius* | | 3 | 5 | Shrub (M) | Vegetative |
| *Chrysopogon fallax* | | 60 | 1 | Tussock grass (G) | Flower |
| *Corymbia dichromophloia* | | 4 | 12 | Tree (U) | Fruit |

| De-09 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Eriachne ciliata* | | 2 | 0.25 | Tussock grass (G) | Fruit |
| *Eriachne obtusa* | | 2 | 0.5 | Tussock grass (G) | Flower |
| *Euploca ovalifolia* | | 1 | 0.25 | Forb (G) | Flower |
| *Evolvulus alsinoides* subsp. *villosicalyx* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Ficus aculeata* var. *indecora* | | 2 | 1.5 | Shrub (M) | Vegetative |
| *Fimbristylis tetragona* | | 1 | 0.25 | Sedge (G) | Fruit |
| *Glycine tomentella* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Goodenia heppleana* | | 1 | 0.1 | Forb (G) | Flower |
| *Grevillea pyramidalis* subsp. *pyramidalis* | | 1 | 0.25 | Shrub (M) | Vegetative |
| *Hibiscus austrinus* | | 1 | 0.25 | Forb (G) | Flowerbud |
| *Lysiandra ?arida* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Lysiphyllum cunninghamii* | | 4 | 1.5 | Shrub (M) | Vegetative |
| *Microstachys chamaelea* | | 1 | 0.1 | Forb (G) | Immature fruit |
| *Murdannia graminea* | | 1 | 0.25 | Forb (G) | Flower |
| *Panicum majusculum* | | 3 | 0.25 | Tussock grass (G) | Fruit |
| *Panicum trachyrhachis* | | 2 | 0.5 | Tussock grass (G) | Flower |
| *Planchonia careya* | | 2 | 8 | Tree (U) | Flower |
| *Pterocaulon* sp. (indet) | | 1 | 0.1 | Forb (G) | Vegetative |
| *Solanum cunninghamii* | | 4 | 0.25 | Forb (G) | Flower |
| *Spermacoce occidentalis* | | 1 | 0.25 | Forb (G) | Flower |
| *Tinospora smilacina* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Trianthema pilosum* | | 2 | 0.1 | Forb (G) | Flower |
| *Tribulopis angustifolia* | | 2 | 0.25 | Forb (G) | Flower |
| *Trichodesma zeylanicum* var. *latisepaleum* | | 2 | 0.75 | Forb (G) | Vegetative |
| *Triodia caelestialis* | | 2 | 0.25 | Hummock grass (G) | Vegetative |
| *Waltheria indica* | | 1 | 0.25 | Forb (G) | Vegetative |

| Sample ID: De-10 | VT03 | Site: C |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 23/03/2024 | Described by J. Collins |
| **Coordinates:** | 123.6621274 | -17.34062002 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Light brown sandy loam | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Very good |
| **Bare ground:** | 2-10% | **Fire age and intensity:** | Old: 6+ years |
| **Litter cover:** | 11-30% | **Disturbance:** | Weeds present |



| De-10 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Abutilon hannii* | | 1 | 0.25 | Forb (G) | Flower |
| *Acacia plectocarpa* subsp. *plectocarpa* | | 3 | 3 | Shrub (M) | Vegetative |
| *Acacia tumida* var. *kulparn* | | 4 | 1.5 | Shrub (M) | Vegetative |
| *Adansonia gregorii* | | 4 | 8 | Tree (U) | Vegetative |
| *Azadirachta indica* | * | 2 | 2 | Shrub (M) | Vegetative |
| *Calytrix exstipulata* | | 20 | 2 | Shrub (M) | Vegetative |
| ?*Calytrix* sp. (indet) | | 1 | 0.25 | Shrub (M) | Vegetative |
| *Cassytha filiformis* | | 1 | 0.5 | Forb (G) | Flowerbud |
| *Corymbia* sp. (indet) | | 2 | 8 | Tree (U) | Vegetative |

| De-10 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Corymbia zygophylla* | | 5 | 10 | Tree (U) | Fruit |
| *Drosera derbyensis* | | 2 | 0.1 | Forb (G) | Flower |
| *Ficus aculeata* var. *indecora* | | 1 | 1.5 | Shrub (M) | Vegetative |
| *Flueggea virosa* subsp. *melanthesoides* | | 20 | 1.75 | Shrub (M) | Fruit |
| *Grevillea pyramidalis* subsp. *pyramidalis* | | 2 | 1.75 | Shrub (M) | Vegetative |
| *Hakea arborescens* | | 5 | 4 | Tree (U) | Dehisced fruit |
| *Lysiandra ?arida* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Lysiphyllum cunninghamii* | | 1 | 4 | Tree (U) | Vegetative |
| *Melaleuca cajuputi* subsp. *cajuputi* | | 15 | 7 | Tree (U) | Fruit |
| *Melhania oblongifolia* | | 2 | 0.25 | Forb (G) | Vegetative |
| *Planchonia careya* | | 1 | 1 | Shrub (M) | Vegetative |
| *Poaceae* sp. (indet) | | 1 | 0.5 | Tussock grass (G) | Vegetative |
| *Pterocaulon* sp. (indet) | | 1 | 0.25 | Forb (G) | Vegetative |
| *Senna venusta* | | 2 | 1.75 | Shrub (M) | Fruit |
| *Solanum cunninghamii* | | 1 | 0.25 | Forb (G) | Flower |
| *Terminalia canescens* | | 11 | 4 | Shrub (M) | Dehisced fruit |
| *Waltheria indica* | | 2 | 0.25 | Forb (G) | Vegetative |

| Sample ID: De-11 | VT04 | Site: O / Connection Corridor |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 24/03/2024 | Described by J. Collins |
| **Coordinates:** | 123.6427738 | -17.31314135 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Light brown silty loam | **Aspect:** | Flat |
| **Drainage:** | Good | **Vegetation condition:** | Degraded |
| **Bare ground:** | <2% | **Fire age and intensity:** | Old: 6+ years |
| **Litter cover:** | 11-30% | **Disturbance:** | High: weeds, tracks & rubbish present |



| De-11 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Abrus precatorius* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Abutilon hannii* | | 1 | 1.25 | Forb (G) | Flower |
| *Abutilon otocarpum* | | 1 | 0.5 | Forb (G) | Flower |
| *Abutilon* sp. (indet) | | 1 | 0.1 | Forb (G) | Flower |
| *Acacia monticola* | | 1 | 1 | Shrub (M) | Dehisced fruit |
| *Acacia tumida* var. *kulparn* | | 1 | 1.5 | Shrub (M) | Vegetative |
| *Adansonia gregorii* | | 15 | 12 | Tree (U) | Fruit |
| *Alstonia linearis* | | 1 | 1.25 | Shrub (M) | Flower |

| De-11 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Azadirachta indica* | * | 5 | 2 | Shrub (M) | Vegetative |
| *Boerhavia coccinea* | Mixed | 1 | 0.1 | Forb (G) | Vegetative |
| *Bonamia pannosa* | | 1 | 0.25 | Forb (G) | Flower |
| *Calytrix exstipulata* | | 1 | 2 | Shrub (M) | Vegetative |
| *Cenchrus ciliaris* | * | 60 | 1.25 | Tussock grass (G) | Fruit |
| *Chrysopogon fallax* | | 2 | 1.25 | Tussock grass (G) | Flowerbud |
| *Corymbia dichromophloia* | | 10 | 12 | Tree (U) | Fruit |
| *Corymbia zygophylla* | | 5 | 12 | Tree (U) | Fruit |
| *Distimake dissectus var. dissectus* | * | 1 | 1.5 | Vine (G) | Vegetative |
| *Euploca diversifolia* | | 1 | 0.25 | Forb (G) | Flower |
| *Evolvulus alsinoides* subsp. *villosicalyx* | | 2 | 0.25 | Forb (G) | Flower |
| *Flueggea virosa* subsp. *melanthesoides* | | 2 | 1.75 | Shrub (M) | Fruit |
| *Grona filiformis* | | 1 | 0.25 | Forb (G) | Flower |
| *Indigofera linnaei* | | 1 | 0.25 | Forb (G) | Flower |
| *Jasminum didymum* subsp. *lineare* | | 1 | 0.25 | Shrub (M) | Flower |
| *Lysiphyllum cunninghamii* | | 4 | 6 | Tree (U) | Vegetative |
| *Ocimum basilicum* | * | 4 | 1 | Forb (G) | Flower |
| *Panicum laevinode* | | 1 | 1.5 | Other grass (G) | Flowerbud |
| *Rhynchosia minima* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Spermacoce occidentalis* | | 1 | 0.25 | Forb (G) | Flower |
| *Stylosanthes hamata* | * | 4 | 0.25 | Forb (G) | Flower |
| *Terminalia volucris* | | 20 | 8 | Tree (U) | Vegetative |
| *Trichodesma zeylanicum* var. *latisepaleum* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Triumfetta johnstonii* | | 1 | 0.25 | Forb (G) | Flower |
| *Vigna lanceolata* | | 2 | 0.25 | Forb (G) | Vegetative |
| *Waltheria indica* | | 3 | 0.25 | Forb (G) | Flower |

| Sample ID: De-21 | VT04 | Site: D |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 20/03/2024 | Described by P. Jayasekara |
| **Coordinates:** | 123.6751956 | -17.33684436 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Sandy loam | **Aspect:** | Northwest |
| **Drainage:** | Poor | **Vegetation condition:** | Very good |
| **Bare ground:** | 31-70% | **Fire age and intensity:** | Recent: 0-2 years |
| **Litter cover:** | 11-30% | **Disturbance:** | Wildlife tracks |





| De-21 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia plectocarpa* subsp. *plectocarpa* | | 1 | 9 | Tree (U) | vegetative |
| *Adansonia gregorii* | | 1 | 11 | Tree (U) | fruit |
| *Calytrix exstipulata* | | 2 | 1.75 | Shrub (M) | vegetative |
| *Chrysopogon fallax* | | 2 | 0.25 | Tussock grass (G) | Fruit |
| *Corymbia opaca* | | 1 | 10 | Tree (U) | vegetative |
| *Euploca leptalea* | | 1 | 0.1 | Forb (G) | Flower |
| *Flueggea virosa* subsp. *melanthesoides* | | 2 | 1.5 | Shrub (M) | Fruit |
| *Solanum cunninghamii* | | 1 | 0.1 | Forb (G) | Flower |
| *Terminalia canescens* | | 5 | 2.5 | Shrub (M) | vegetative |
| *Zornia prostrata* | | 1 | 0.1 | Forb (G) | Fruit |

| Sample ID: De-22 | VT03 | Site: C |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 20/03/2024 | Described by P. Jayasekara |
| **Coordinates:** | 123.6560306 | -17.33870132 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Red-brown Clay | **Aspect:** | Northwest |
| **Drainage:** | Seasonal wet | **Vegetation condition:** | Very good |
| **Bare ground:** | 31-70% | **Fire age and intensity:** | Old: 6+ years |
| **Litter cover:** | 11-30% | **Disturbance:** | Wildlife tracks |



| De-22 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Abrus precatorius* | | 1 | 0.25 | Shrub (M) | Vegetative |
| *Acacia latifolia* | | 1 | 1.25 | Shrub (M) | Vegetative |
| *Acacia plectocarpa* subsp. *plectocarpa* | | 1 | 7 | Tree (U) | Vegetative |
| *Acacia tumida* var. *kulparn* | | 1 | 2 | Shrub (M) | Fruit |
| *Adansonia gregorii* | | 1 | 10 | Tree (U) | Fruit |
| *Azadirachta indica* | * | 3 | 6.5 | Tree (U) | Vegetative |
| *Bonamia* sp. (indet) | | 3 | 0.1 | Forb (G) | Flower |
| *Calytrix exstipulata* | | 4 | 2 | Shrub (M) | Vegetative |
| *Capparis spinosa* subsp. *nummularia* | | 1 | 0.1 | Vine (G) | Vegetative |

| De-22 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Chrysopogon fallax* | | 2 | 0.1 | Tussock grass (G) | Fruit |
| *Corchorus tridens* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Ehretia saligna* var. *saligna* | | 3 | 5 | Tree mallee (U) | Vegetative |
| *Flueggea virosa* subsp. *melanthesoides* | | 3 | 4 | Shrub (M) | Fruit |
| *Grevillea pyramidalis* subsp. *pyramidalis* | | 1 | 5 | Tree (U) | Flower |
| *Gyrocarpus americanus* subsp. *pachyphyllus* | | 1 | 2 | Shrub (M) | Vegetative |
| *Hakea macrocarpa* | | 1 | 2.25 | Shrub (M) | Fruit |
| *Jasminum molle* | | 1 | 0.1 | Vine (G) | Flower |
| *Lysiphyllum cunninghamii* | | 1 | 2.5 | Shrub (M) | Vegetative |
| *Ptilotus polystachyus* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Rhynchosia minima* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Santalum lanceolatum* | | 1 | 1.75 | Shrub (M) | Fruit |
| *Terminalia canescens* | | 1 | 1.75 | Shrub (M) | Vegetative |
| *Zornia prostrata* | | 1 | 0.1 | Forb (G) | Vegetative |

| Sample ID: De-23 | VT03 | Site C |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 20/03/2024 | Described by P. Jayasekara |
| **Coordinates:** | 123.6582855 | -17.34200153 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Red-brown Clay | **Aspect:** | Northwest |
| **Drainage:** | Seasonal wet | **Vegetation condition:** | Very good |
| **Bare ground:** | 2-10% | **Fire age and intensity:** | Old: 6+ years |
| **Litter cover:** | 31-70% | **Disturbance:** | Wildlife tracks |



| De-23 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Abrus precatorius* | | 1 | 1.25 | Shrub (M) | Vegetative |
| *Acacia tumida* var. *kulparn* | | 1 | 6 | Tree (U) | Vegetative |
| *Adansonia gregorii* | | 2 | 8 | Tree (U) | Fruit |
| *Atalaya hemiglauca* | | 2 | 4 | Tree (U) | Vegetative |
| *Azadirachta indica* | * | 1 | 1.75 | Tree (U) | Vegetative |
| *Calytrix exstipulata* | | 10 | 2.5 | Shrub (M) | Vegetative |
| *Corchorus sidoides* subsp. *sidoides* | | 1 | 0.5 | Shrub (M) | Fruit |
| *Corymbia opaca* | | 1 | 5 | Tree (U) | Fruit |
| *Cynanchum floribundum* | | 1 | | Vine (G) | Vegetative |

| De-23 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Ficus tinctoria* | | 1 | 1.25 | Shrub (M) | Vegetative |
| *Flueggea virosa* subsp. *melanthesoides* | | 3 | 1.75 | Shrub (M) | Fruit |
| *Hakea macrocarpa* | | 1 | 1.25 | Shrub (M) | Vegetative |
| *Jasminum molle* | | 20 | 0.75 | Forb (G) | Flower |
| *Lysiphyllum cunninghamii* | | 2 | 4 | Tree (U) | Vegetative |
| *Nellica maderaspatensis* | | 1 | 0.25 | Forb (G) | Fruit |
| *Premna acuminata* | | 4 | 3.5 | Shrub (M) | Flower |
| *Ptilotus polystachyus* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Santalum lanceolatum* | | 2 | 1.5 | Shrub (M) | Fruit |
| *Senna costata* | | 1 | 1.25 | Shrub (M) | Flower |
| *Trichodesma zeylanicum* var. *latisepaleum* | | 1 | 1.25 | Forb (G) | Flower |
| *Zornia chaetophora* | | 1 | 0.25 | Forb (G) | Flower |

| Sample ID: De-24 | VT04 | Site: D |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 20/03/2024 | Described by P. Jayasekara |
| **Coordinates:** | 123.6735091 | -17.34450896 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Red-brown sandy loam | **Aspect:** | Northwest |
| **Drainage:** | Seasonal wet | **Vegetation condition:** | Very good |
| **Bare ground:** | 31-70% | **Fire age and intensity:** | Old: 6+ years |
| **Litter cover:** | 31-70% | **Disturbance:** | Wildlife tracks |



| De-24 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia plectocarpa* subsp. *plectocarpa* | | 1 | 6 | Tree (U) | Vegetative |
| *Acacia tumida* var. *kulparn* | | 1 | 2.25 | Shrub (M) | Vegetative |
| *Adansonia gregorii* | | 3 | 12 | Tree (U) | Vegetative |
| *Atalaya hemiglauca* | | 1 | 2.25 | Tree (U) | Vegetative |
| *Azadirachta indica* | * | 1 | 2.25 | Tree (U) | Vegetative |
| *Bonamia* sp. (indet) | | 1 | 0.1 | Forb (G) | Vegetative |
| *Calytrix exstipulata* | | 1 | 1.75 | Shrub (M) | Vegetative |
| *Carissa lanceolata* | | 1 | 2 | Shrub (M) | Vegetative |
| *Cochlospermum fraseri* | | 2 | 4 | Shrub (M) | Vegetative |

| De-24 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Corchorus sidoides subsp. sidoides* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Corymbia* sp. (indet) | | 2 | 10 | Tree (U) | Fruit |
| *Cynanchum floribundum* | | 1 | | Vine (G) | Vegetative |
| *Drosera derbyensis* | | 1 | 0.1 | Forb (G) | Flower |
| *Ficus tinctoria* | | 1 | 1.75 | Shrub (M) | Vegetative |
| *Flueggea virosa* subsp. *melanthesoides* | | 1 | 1.75 | Shrub (M) | Fruit |
| *Grevillea pyramidalis* subsp. *pyramidalis* | | 1 | 5 | Tree mallee (U) | Vegetative |
| *Lysiphyllum cunninghamii* | | 1 | 3 | Tree (U) | Vegetative |
| *Nellica maderaspatensis* | | 1 | 0.25 | Forb (G) | Fruit |
| *Solanum cunninghamii* | | 1 | 0.5 | Forb (G) | Flower |
| *Terminalia canescens* | | 2 | 2 | Shrub (M) | Vegetative |
| *Trichodesma zeylanicum* var. *latisepaleum* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Triodia caelestialis* | | 1 | 0.25 | Hummock grass (G) | Vegetative |
| *Zornia prostrata* | | 1 | 0.1 | Forb (G) | Vegetative |

**Camballin/Looma quadrat/releve data**

| Sample ID: Lo-01 | VT01 | Camballin |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 24/03/2024 | Described by J. Collins |
| **Coordinates:** | 124.1607274 | -18.02724676 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Red-orange sand | **Aspect:** | South |
| **Drainage:** | Good | **Vegetation condition:** | Excellent |
| **Bare ground:** | 2-10% | **Fire age and intensity:** | Old: 6+ years |
| **Litter cover:** | 2-10% | **Disturbance:** | Minimal, occasional weeds |



| Lo-01 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Abutilon otocarpum* | | 1 | 0.25 | Forb (G) | Flower |
| *Acacia tumida* | | 25 | 6 | Shrub (M) | Vegetative |
| *Afrohybanthus aurantiacus* | | 1 | 0.25 | Forb (G) | Flowerbud |
| *Aristida hygrometrica* | | 2 | 0.25 | Tussock grass (G) | Fruit |
| *Arivela viscosa* | | 1 | 0.25 | Forb (G) | Flower |
| *Boerhavia coccinea* | Mixed | 1 | 0.1 | Forb (G) | Vegetative |
| *Calotropis gigantea* | * | 1 | 0.25 | Forb (G) | Vegetative |

| Lo-01 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| ?Convolvulaceae (indet) | | 1 | 0.1 | Forb (G) | Vegetative |
| *Corchorus sidoides* subsp. *sidoides* | | 4 | 0.5 | Shrub (M) | Flower |
| *Corymbia zygophylla* | | 10 | 8 | Tree (U) | Fruit |
| *Eragrostis setifolia* | | 2 | 0.5 | Tussock grass (G) | Fruit |
| *Eriachne ciliata* | | 1 | 0.25 | Other grass (G) | Flower |
| *Eriachne melicacea* | | 1 | 0.25 | Tussock grass (G) | Immature fruit |
| *Euploca leptalea* | | 1 | 0.1 | Forb (G) | Flower |
| *Fimbristylis ?dichotoma* | | 1 | 0.25 | Sedge (G) | Flower |
| *Gossypium australe* | | 2 | 0.5 | Forb (G) | Vegetative |
| *Grevillea wickhamii* subsp. *aprica* | | 1 | 2 | Shrub (M) | Dehisced fruit |
| *Jasminum didymum* subsp. *lineare* | | 3 | 1.25 | Shrub (M) | Flower |
| *Lysiandra ?arida* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Lysiphyllum cunninghamii* | | 3 | 6 | Tree (U) | Vegetative |
| *Melhania oblongifolia* | | 2 | 0.25 | Forb (G) | Vegetative |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | P3 | 2 | 0.25 | Forb (G) | Flower |
| *Portulaca* sp. (indet) | | 1 | 0.1 | Forb (G) | Fruit |
| *Pterocaulon* sp. (indet) | | 1 | 0.25 | Forb (G) | Vegetative |
| *Ptilotus calostachyus* | | 1 | 0.25 | Forb (G) | Flower |
| *Senna costata* | | 1 | 1 | Shrub (M) | Fruit |
| *Tinospora smilacina* | | 2 | 2.5 | Vine (G) | Vegetative |
| *Trianthema pilosum* | | 1 | 0.1 | Forb (G) | Flower |
| *Tribulopis angustifolia* | | 1 | 0.1 | Forb (G) | Flower |
| *Triodia schinzii* | | 65 | 1.5 | Hummock grass (G) | Immature fruit |
| *Zornia chaetophora* | | 1 | 0.25 | Forb (G) | Flowerbud |

| Sample ID: Lo-02 | VT01 | Camballin |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 24/03/2024 | Described by J. Collins |
| **Coordinates:** | 124.1614829 | -18.02864115 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Red-orange sand | **Aspect:** | South |
| **Drainage:** | Good | **Vegetation condition:** | Excellent |
| **Bare ground:** | 2-10% | **Fire age and intensity:** | Moderate: 3-5 years |
| **Litter cover:** | 2-10% | **Disturbance:** | Minimal, occasional weeds |



| Lo-02 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia tumida* | | 25 | 5 | Shrub (M) | Vegetative |
| *Adansonia gregorii* | | 10 | 14 | Tree (U) | Dehisced fruit |
| *Aristida hygrometrica* | | 15 | 0.25 | Tussock grass (G) | Fruit |
| *Boerhavia coccinea* | Mixed | 1 | 0.1 | Forb (G) | Vegetative |
| *Calotropis gigantea* | * | 1 | 0.25 | Forb (G) | Vegetative |
| ?Convolvulaceae (indet) | | 1 | 0.1 | Forb (G) | Vegetative |
| *Corchorus sidoides* subsp. *sidoides* | | 2 | 0.5 | Shrub (M) | Flower |
| *Corymbia zygophylla* | | 5 | 8 | Tree (U) | Fruit |

| Lo-02 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Cucumis variabilis* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Eragrostis setifolia* | | 2 | 0.5 | Tussock grass (G) | Fruit |
| *Eriachne ciliata* | | 1 | 0.25 | Other grass (G) | Flower |
| *Euploca leptalea* | | 1 | 0.1 | Forb (G) | Flower |
| *Fimbristylis ?dichotoma* | | 1 | 0.25 | Sedge (G) | Flower |
| *Grevillea refracta* | | 20 | 2 | Shrub (M) | Dehisced fruit |
| *Grona filiformis* | | 1 | 0.25 | Forb (G) | Immature fruit |
| *Lysiandra ?arida* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Melhania oblongifolia* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Panicum laevinode* | | 1 | 1.25 | Tussock grass (G) | Fruit |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | P3 | 1 | 0.1 | Forb (G) | Flower |
| *Portulaca* sp. (indet) | | 1 | 0.1 | Forb (G) | Fruit |
| *Premna acuminata* | | 1 | 3 | Shrub (M) | Fruit |
| *Ptilotus calostachyus* | | 1 | 0.25 | Forb (G) | Flower |
| *Senna venusta* | | 1 | 2.75 | Shrub (M) | Fruit |
| *Solanum cunninghamii* | | 2 | 0.5 | Forb (G) | Fruit |
| *Tinospora smilacina* | | 2 | 2.5 | Vine (G) | Vegetative |
| *Tribulopis angustifolia* | | 1 | 0.1 | Forb (G) | Flower |
| *Trichodesma zeylanicum* var. *latisepaleum* | | 2 | 1 | Forb (G) | Vegetative |
| *Triodia schinzii* | | 65 | 1.5 | Hummock grass (G) | Immature fruit |
| *Zornia muelleriana* subsp. *congesta* | | 1 | 0.25 | Forb (G) | Immature fruit |

**Halls Creek quadrat/releve data**

| Sample ID: HC-01 | VT10 | Subsite C3 |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 23/04/2024 | Described by J. Collins |
| **Coordinates:** | 127.6499961 | -18.23838314 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Brown sandy loam | **Aspect:** | South |
| **Drainage:** | Good | **Vegetation condition:** | Excellent |
| **Bare ground:** | 15% | **Fire age and intensity:** | 5+ years |
| **Litter cover:** | 1% | **Disturbance:** | Minimal, near track |



| HC-01 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia colei* | | 2 | 1.5 | Shrub (M) | Flowerbud |
| *Aristida holathera* var. *holathera* | | 3 | 0.75 | Tussock grass (G) | Fruit |
| *Boerhavia paludosa* | | 1 | 0.25 | Forb (G) | Flower |
| *Cassytha filiformis* | | 1 | 0.25 | Forb (G) | Immature fruit |
| *Corymbia ferruginea* subsp. *stypophylla* | | 1 | 8 | Tree (U) | Dehisced fruit |
| *Crotalaria cunninghamii* subsp. *sturtii* | | 1 | 0.25 | Forb (G) | Flower |
| *Cullen martinii* | | 1 | 1.5 | Shrub (M) | Vegetative |

| HC-01 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Cymbopogon procerus* | | 1 | 1 | Tussock grass (G) | Fruit |
| *Enneapogon polyphyllus* | | 4 | 0.25 | Tussock grass (G) | Fruit |
| *Enneapogon purpurascens* | | 1 | 0.25 | Tussock grass (G) | Fruit |
| *Eriachne ciliata* | | 1 | 0.1 | Other grass (G) | Fruit |
| *Eriachne mucronata* | | 1 | 0.5 | Tussock grass (G) | Fruit |
| *Eucalyptus alba* var. *australasica* | | 4 | 8 | Tree (U) | Fruit |
| *Euphorbia coghlanii* | | 1 | 0.25 | Forb (G) | Flower |
| *Euploca cunninghamii* | | 1 | 0.1 | Forb (G) | Flower |
| *Evolvulus alsinoides* var. *villosicalyx* | | 1 | 0.1 | Forb (G) | Fruit |
| *Fimbristylis dichotoma* | | 1 | 0.1 | Sedge (G) | Fruit |
| *Gomphrena canescens* | | 1 | 0.25 | Forb (G) | Flower |
| *Goodenia odonnellii* | | 1 | 0.1 | Forb (G) | Flower |
| *Grevillea pyramidalis* subsp. *pyramidalis* | | 2 | 3.25 | Shrub (M) | Dehisced fruit |
| *Heteropogon contortus* | | 53 | 1.5 | Tussock grass (G) | Fruit |
| *Hibiscus sturtii* | | 1 | 0.25 | Forb (G) | Dehisced fruit |
| *Indigastrum parviflorum* | | 1 | 0.25 | Forb (G) | Flower |
| *Indigofera linifolia* | | 1 | 0.25 | Forb (G) | Flower |
| *Panicum decompositum* | | 1 | 1.25 | Tussock grass (G) | Fruit |
| *Polycarpaea holtzei* | | 1 | 0.1 | Forb (G) | Flower |
| *Polygala galeocephala* | | 1 | 0.1 | Forb (G) | Immature fruit |
| *Ptilotus spicatus* | | 1 | 0.25 | Forb (G) | Fruit |
| *Rhynchosia minima* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Sida fibulifera* | | 1 | 0.25 | Forb (G) | Flower |
| *Sorghum plumosum* | | 1 | 1.25 | Tussock grass (G) | Immature fruit |
| *Stylosanthes hamata* | * | 1 | 0.25 | Forb (G) | Flower |
| *Themeda triandra* | | 2 | 1 | Tussock grass (G) | Fruit |
| *Trichodesma zeylanicum* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Triodia wiseana* | | 20 | 1.25 | Hummock grass (G) | Fruit |
| *Urochloa* sp. (indet) | | 1 | 0.25 | Tussock grass (G) | Dehisced fruit |
| *Zornia muriculata* | | 1 | 0.1 | Forb (G) | Vegetative |

| Sample ID: HC-02 | VT09 | Subsite C3 |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 23/04/2024 | Described by J. Collins |
| **Coordinates:** | 127.6474455 | -18.24707313 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Brown sandy loam | **Aspect:** | East |
| **Drainage:** | Good | **Vegetation condition:** | Excellent |
| **Bare ground:** | 5% | **Fire age and intensity:** | 5+ years |
| **Litter cover:** | 1% | **Disturbance:** | Minimal, near track |



| HC-02 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia colei* | | 1 | 1.5 | Shrub (M) | Flowerbud |
| *Acacia trachycarpa* | | 85 | 2 | Shrub (M) | Flower |
| *Aristida pruinosa* | | 1 | 0.5 | Tussock gras (G) | Flower |
| *Corchorus tridens* | | 2 | 0.25 | Shrub (M) | Flower |
| *Corymbia ferruginea* subsp. *stypophylla* | | 1 | 6 | Tree (U) | Dehisced fruit |
| *Cucumis melo* | | 1 | 0.1 | Forb (G) | Flower |
| *Eriachne ciliata* | | 1 | 0.1 | Other grass (G) | Fruit |
| *Eucalyptus alba* var. *australasica* | | 10 | 8 | Tree (U) | Fruit |
| *Eulalia aurea* | | 2 | 1 | Tussock grass (G) | Fruit |

| HC-02 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Euphorbia coghlanii* | | 1 | 0.25 | Forb (G) | Flower |
| *Fimbristylis dichotoma* | | 2 | 0.1 | Sedge (G) | Fruit |
| *Goodenia scaevolina* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Hibiscus sturtii* | | 1 | 0.25 | Forb (G) | Dehisced fruit |
| *Ipomoea polymorpha* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Polycarpaea holtzei* | | 1 | 0.1 | Forb (G) | Flower |
| *Polycarpaea longiflora* | | 1 | 0.1 | Forb (G) | Flower |
| *Polygala galeocephala* | | 1 | 0.1 | Forb (G) | Immature fruit |
| *Ptilotus calostachyus* | | 1 | 0.25 | Forb (G) | Flower |
| *Ptilotus spicatus* | | 1 | 0.25 | Forb (G) | Fruit |
| *Trigastrotheca molluginea* | | 1 | 0.1 | Forb (G) | Flower |
| *Triodia wiseana* | | 10 | 1.25 | Hummock grass (G) | Fruit |
| *Zornia muriculata* | | 1 | 0.25 | Herb (G) | Flower |

| Sample ID: HC-03 | VT10 | Subsite C3 |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 23/04/2024 | Described by J. Collins |
| **Coordinates:** | 127.6509668 | -18.24183483 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Brown sandy loam | **Aspect:** | West |
| **Drainage:** | Good | **Vegetation condition:** | Excellent |
| **Bare ground:** | 2% | **Fire age and intensity:** | 1 year |
| **Litter cover:** | 1% | **Disturbance:** | Near track, recent fire |



| HC-03 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia adoxa* | | 15 | 0.5 | Shrub (M) | Flower |
| *Acacia colei* | | 1 | 1.5 | Shrub (M) | Vegetative |
| *Aristida holathera* var. *holathera* | | 15 | 0.75 | Tussock grass (G) | Fruit |
| *Aristida pruinosa* | | 4 | 1.5 | Tussock grass (G) | Fruit |
| *Arivela viscosa* | | 1 | 0.25 | Forb (G) | Immature fruit |
| *Cassytha filiformis* | | 1 | 0.25 | Forb (G) | Immature fruit |
| *Corchorus tridens* | | 2 | 0.25 | Shrub (M) | Flower |
| *Crotalaria medicaginea* var. *neglecta* | | 1 | 0.25 | Forb (G) | Flower |

| HC-03 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Cucumis melo* | | 1 | 0.25 | Forb (G) | Fruit |
| *Cymbopogon procerus* | | 1 | 1 | Tussock grass (G) | Fruit |
| *Enneapogon polyphyllus* | | 1 | 0.25 | Tussock grass (G) | Fruit |
| *Eriachne ciliata* | | 1 | 0.1 | Other grass (G) | Fruit |
| *Eucalyptus alba* var. *australasica* | | 5 | 10 | Tree (U) | Fruit |
| *Eulalia aurea* | | 30 | 1 | Tussock grass (G) | Fruit |
| *Euphorbia coghlanii* | | 1 | 0.25 | Forb (G) | Flower |
| *Euploca cunninghamii* | | 5 | 0.1 | Forb (G) | Flower |
| *Fimbristylis simulans* | | 5 | 0.1 | Sedge (G) | Fruit |
| *Gomphrena canescens* | | 1 | 0.25 | Forb (G) | Flower |
| *Goodenia odonnellii* | | 1 | 0.1 | Forb (G) | Flower |
| *Goodenia scaevolina* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Gossypium australe* | | 1 | 0.5 | Shrub (M) | Flower |
| *Heteropogon contortus* | | 1 | 1 | Tussock grass (G) | Fruit |
| *Hibiscus sturtii* | | 1 | 0.25 | Forb (G) | Dehisced fruit |
| *Indigofera linifolia* | | 3 | 0.25 | Forb (G) | Flower |
| *Indigofera monophylla* | | 2 | 0.5 | Shrub (M) | Flower |
| *Panicum decompositum* | | 1 | 1.25 | Tussock grass (G) | Fruit |
| *Polycarpaea holtzei* | | 1 | 0.1 | Forb (G) | Flower |
| *Polygala galeocephala* | | 1 | 0.1 | Forb (G) | Immature fruit |
| *Ptilotus calostachyus* | | 1 | 0.25 | Forb (G) | Flower |
| *Ptilotus spicatus* | | 1 | 0.25 | Forb (G) | Fruit |
| *Schizachyrium fragile* | | 20 | 0.5 | Tussock grass (G) | Fruit |
| *Senna oligoclada* | | 1 | 1 | Shrub (M) | Flower |
| *Stackhousia intermedia* | | 2 | 0.25 | Forb (G) | Flower |
| *Trigastrotheca molluginea* | | 1 | 0.1 | Forb (G) | Flower |
| *Triodia wiseana* | | 15 | 0.5 | Hummock grass (G) | Fruit |

| Sample ID: HC-04 | VT11 | Subsite C3 |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 24/04/2024 | Described by J. Collins |
| **Coordinates:** | 127.6546390 | -18.24200841 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Brown clay loam | **Aspect:** | West |
| **Drainage:** | Moderate | **Vegetation condition:** | Excellent |
| **Bare ground:** | 3% | **Fire age and intensity:** | 3 years |
| **Litter cover:** | 1% | **Disturbance:** | Minimal, near track |



| HC-04 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia colei* | | 1 | 1.25 | Shrub (M) | Flowerbud |
| *Afrohybanthus aurantiacus* | | 1 | 0.25 | Forb (G) | Flower |
| *Aristida holathera var. holathera* | | 2 | 0.75 | Tussock grass (G) | Fruit |
| *Aristida pruinosa* | | 5 | 1.5 | Tussock grass (G) | Fruit |
| *Arivela viscosa* | | 1 | 0.25 | Forb (G) | Immature fruit |
| *Byblis rorida* | | 1 | 0.1 | Forb (G) | Flower |
| *Crotalaria montana* var. *angustifolia* | | 1 | 0.25 | Forb (G) | Immature fruit |
| *Cucumis melo* | | 1 | 0.25 | Forb (G) | Fruit |

| HC-04 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Cyperus pulchellus* | | 1 | 0.25 | Sedge (G) | Fruit |
| *Cyperus squarrosus* | | 1 | 0.25 | Sedge (G) | Fruit |
| *Eragrostis tenella* | * | 1 | 0.25 | Other grass (G) | Fruit |
| *Eragrostis tenellula* | | 2 | 0.25 | Other grass (G) | Fruit |
| *Eriachne mucronata* | | 1 | 0.5 | Tussock grass (G) | Fruit |
| *Eucalyptus alba* var. *australasica* | | 15 | 10 | Tree (U) | Fruit |
| *Eulalia aurea* | | 3 | 1 | Tussock grass (G) | Fruit |
| *Euploca cunninghamii* | | 1 | 0.1 | Forb (G) | Flower |
| *Evolvulus alsinoides* var. *villosicalyx* | | 1 | 0.1 | Forb (G) | Fruit |
| *Fimbristylis dichotoma* | | 1 | 0.1 | Sedge (G) | Fruit |
| *Goodenia crenata* | P3 | 1 | 0.1 | Forb (G) | Flower |
| *Gossypium australe* | | 1 | 0.5 | Shrub (M) | Flower |
| *Heteropogon contortus* | | 45 | 1.5 | Tussock grass (G) | Fruit |
| *Ipomoea polymorpha* | | 1 | 0.1 | Forb (G) | Fruit |
| *Ludwigia perennis* | | 1 | 0.25 | Forb (G) | Immature fruit |
| *Minuria* sp. (indet) | | 1 | 0.1 | Forb | Vegetative |
| *Mitrasacme retroloba* | | 1 | 0.1 | Forb | Flower |
| *Murdannia graminea* | | 1 | 0.1 | Forb (G) | Dehisced fruit |
| *Panicum decompositum* | | 1 | 1.25 | Tussock grass (G) | Fruit |
| *Polygala galeocephala* | | 1 | 0.1 | Forb (G) | Immature fruit |
| *Ptilotus fusiformis* | | 1 | 0.25 | Forb (G) | Flower |
| *Senna oligoclada* | | 1 | 1 | Shrub (M) | Flower |
| *Spermacoce* sp. Platysperma (J.R. Clarkson 6546) | | 1 | 0.1 | Forb (G) | Flower |
| *Striga squamigera* | | 1 | 0.1 | Forb (G) | Flower |
| *Stylosanthes hamata* | * | 1 | 0.25 | Forb (G) | Flower |
| *Triodia wiseana* | | 3 | 0.5 | Hummock grass (G) | Fruit |
| *Urochloa* sp. (indet) | | 1 | 0.25 | Tussock grass (G) | Dehisced fruit |
| *Vigna lanceolata* var. *lanceolata* | | 2 | 0.25 | Forb (G) | Vegetative |
| *Waltheria indica* | | 1 | 0.25 | Forb (G) | Flower |
| *Zornia muriculata* | | 2 | 0.25 | Forb (G) | Immature fruit |

| Sample ID: HC-05 | VT09 | Subsite C3 |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 24/04/2024 | Described by J. Collins |
| **Coordinates:** | 127.6539946 | -18.24423183 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Brown clay loam | **Aspect:** | East |
| **Drainage:** | Moderate | **Vegetation condition:** | Excellent |
| **Bare ground:** | 1% | **Fire age and intensity:** | 3 years |
| **Litter cover:** | 1% | **Disturbance:** | Minimal, near track |



| HC-05 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia colei* | | 1 | 2 | Shrub (M) | Flowerbud |
| *Acacia trachycarpa* | | 80 | 2 | Shrub (M) | Flower |
| *Afrohybanthus aurantiacus* | | 1 | 0.25 | Forb (G) | Flower |
| *Aristida pruinosa* | | 1 | 1.5 | Tussock grass (G) | Fruit |
| *Capparis lasiantha* | | 2 | 1.25 | Shrub (M) | Vegetative |
| *Capparis umbonata* | | 2 | 1.5 | Shrub (M) | Vegetative |
| *Chrysopogon pallidus* | | 40 | 2 | Tussock grass (G) | Immature fruit |
| *Corchorus aestuans* | | 1 | 0.25 | Forb (G) | Flower |

| HC-05 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Corymbia ferruginea* subsp. *stypophylla* | | 1 | 6 | Tree (U) | Dehisced fruit |
| *Crotalaria medicaginea* var. *neglecta* | | 1 | 0.25 | Forb (G) | Flower |
| *Cucumis melo* | | 1 | 0.25 | Forb (G) | Fruit |
| *Cyperus squarrosus* | | 1 | 0.25 | Sedge (G) | Fruit |
| *Eragrostis tenella* | * | 1 | 0.25 | Other grass (G) | Fruit |
| *Eragrostis tenellula* | | 1 | 0.25 | Other grass (G) | Fruit |
| *Eriachne ciliata* | | 1 | 0.1 | Other grass (G) | Fruit |
| *Eriachne mucronata* | | 15 | 0.5 | Tussock grass (G) | Fruit |
| *Eucalyptus alba* var. *australasica* | | 20 | 10 | Tree (U) | Fruit |
| *Eulalia aurea* | | 3 | 1 | Tussock grass (G) | Fruit |
| *Euploca cunninghamii* | | 1 | 0.1 | Forb (G) | Flower |
| *Fimbristylis dichotoma* | | 1 | 0.1 | Sedge (G) | Fruit |
| *Goodenia crenata* | P3 | 1 | 0.1 | Forb (G) | Flower |
| *Gossypium australe* | | 1 | 0.5 | Shrub (M) | Flower |
| *Hakea* sp. (indet) | | 1 | 0.25 | Shrub (M) | Vegetative |
| *Heteropogon contortus* | | 1 | 1.75 | Tussock grass (G) | Fruit |
| *Ipomoea polymorpha* | | 2 | 0.25 | Forb (G) | Fruit |
| *Melhania oblongifolia* | | 1 | 0.25 | Forb (G) | Flower |
| *Murdannia graminea* | | 1 | 0.1 | Forb (G) | Dehisced fruit |
| *Neptunia scutata* | | 1 | 0.1 | Forb (G) | Flower |
| *Spermacoce* sp. Platysperma (J.R. Clarkson 6546) | | 1 | 0.1 | Forb (G) | Flower |
| *Striga squamigera* | | 1 | 0.1 | Forb (G) | Flower |
| *Stylosanthes hamata* | * | 1 | 0.25 | Forb (G) | Flower |
| *Urochloa holosericea* subsp. *velutina* | | 1 | 0.25 | Tussock grass (G) | Fruit |
| *Urochloa* sp. (indet) | | 1 | 0.25 | Tussock grass (G) | Dehisced fruit |
| *Vigna lanceolata* var. *lanceolata* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Waltheria indica* | | 1 | 0.25 | Forb (G) | Flower |
| *Zornia muriculata* | | 1 | 0.25 | Forb (G) | Immature fruit |

| Sample ID: HC-06 | VT11 | Subsite C3 |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 24/04/2024 | Described by J. Collins |
| **Coordinates:** | 127.6434362 | -18.24413447 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Brown clay loam | **Aspect:** | South |
| **Drainage:** | Moderate | **Vegetation condition:** | Excellent |
| **Bare ground:** | 2% | **Fire age and intensity:** | 3 years |
| **Litter cover:** | 1% | **Disturbance:** | Minimal, near track |



| HC-06 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Afrohybanthus aurantiacus* | | 1 | 0.25 | Forb (G) | Flower |
| *Alysicarpus muelleri* | | 1 | 0.25 | Forb (G) | Fruit |
| *Capparis lasiantha* | | 1 | 1 | Shrub (M) | Vegetative |
| *Chrysopogon pallidus* | | 20 | 1.5 | Tussock grass (G) | Immature fruit |
| *Clitoria ternatea* | * | 2 | 0.5 | Vine (G) / Forb (G) | Flower / fruit |
| *Corymbia ferruginea* subsp. *stypophylla* | | 1 | 8 | Tree (U) | Dehisced fruit |
| *Crotalaria medicaginea* var. *neglecta* | | 1 | 0.25 | Forb (G) | Flower |
| *Cucumis melo* | | 1 | 0.25 | Forb (G) | Fruit |

| HC-06 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Ehretia saligna* | | 3 | 1.75 | Shrub (M) | Vegetative |
| *Eucalyptus alba* var. *australasica* | | 2 | 10 | Tree (U) | Fruit |
| *Eulalia aurea* | | 20 | 1 | Tussock grass (G) | Fruit |
| *Goodenia crenata* | P3 | 1 | 0.1 | Forb (G) | Flower |
| *Gossypium australe* | | 1 | 0.5 | Shrub (M) | Flower |
| *Heteropogon contortus* | | 56 | 1.75 | Tussock grass (G) | Fruit |
| *Indigofera linifolia* | | 1 | 0.25 | Forb (G) | Flower |
| *Panicum decompositum* | | 2 | 1.25 | Tussock grass (G) | Fruit |
| *Polygala galeocephala* | | 1 | 0.1 | Forb (G) | Immature fruit |
| *Portulaca oleracea* | | 1 | 0.1 | Forb (G) | Fruit |
| *Ptilotus spicatus* | | 1 | 0.25 | Forb (G) | Flower |
| *Rhynchosia minima* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Themeda triandra* | | 2 | 1 | Tussock grass (G) | Fruit |
| *Trichodesma zeylanicum* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Urochloa* sp. (indet) | | 20 | 0.5 | Tussock grass (G) | Dehisced fruit |

| Sample ID: HC-07 | VT10 | Connection Route (Halls Creek) |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 24/04/2024 | Described by J. Collins |
| **Coordinates:** | 127.6573005 | -18.22947407 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Brown sandy loam | **Aspect:** | Southeast |
| **Drainage:** | Good | **Vegetation condition:** | Very good |
| **Bare ground:** | 4% | **Fire age and intensity:** | 5+ years |
| **Litter cover:** | 3% | **Disturbance:** | Tracks & fence present, previous clearing |



| HC-07 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia adoxa* | | 15 | 0.5 | Shrub (M) | Flower |
| *Acacia ancistrocarpa* | | 1 | 1.75 | Shrub (M) | Flower |
| *Acacia colei* | | 10 | 2.25 | Shrub (M) | Flowerbud |
| *Acacia ptychophylla* | | 1 | 1.75 | Shrub (M) | Flower |
| *Aristida holathera* var. *holathera* | | 5 | 0.75 | Tussock grass (G) | Fruit |
| *Aristida pruinosa* | | 2 | 1.5 | Tussock grass (G) | Fruit |
| *Cassytha filiformis* | | 1 | 0.25 | Forb (G) | Immature fruit |
| *Corchorus tridens* | | 2 | 0.25 | Shrub (M) | Flower |

| HC-07 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Cucumis melo* | | 1 | 0.25 | Forb (G) | Fruit |
| *Cymbopogon procerus* | | 1 | 1 | Tussock grass (G) | Fruit |
| *Enneapogon polyphyllus* | | 1 | 0.25 | Tussock grass (G) | Fruit |
| *Eriachne ciliata* | | 1 | 0.1 | Other grass (G) | Fruit |
| *Eucalyptus alba* var. *australasica* | | 20 | 12 | Tree (U) | Fruit |
| *Eulalia aurea* | | 30 | 1 | Tussock grass (G) | Fruit |
| *Euploca cunninghamii* | | 1 | 0.1 | Forb (G) | Flower |
| *Fimbristylis simulans* | | 2 | 0.1 | Sedge (G) | Fruit |
| *Gomphrena canescens* | | 1 | 0.25 | Forb (G) | Flower |
| *Goodenia odonnellii* | | 1 | 0.1 | Forb (G) | Flower |
| *Goodenia scaevolina* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Grevillea pyramidalis* subsp. *pyramidalis* | | 1 | 0.5 | Shrub (M) | Vegetative |
| *Hibiscus sturtii* | | 1 | 0.25 | Forb (G) | Dehisced fruit |
| *Ipomoea polymorpha* | | 1 | 0.25 | Forb (G) | Fruit |
| *Panicum decompositum* | | 1 | 1.25 | Tussock grass (G) | Fruit |
| *Polycarpaea holtzei* | | 1 | 0.1 | Forb (G) | Flower |
| *Ptilotus calostachyus* | | 1 | 0.25 | Forb (G) | Flower |
| *Ptilotus exaltatus* | | 1 | 0.25 | Forb (G) | Flower |
| *Ptilotus spicatus* | | 1 | 0.25 | Forb (G) | Fruit |
| *Sida* sp. Excedentifolia (J.L Egan 1925) | | 1 | 0.25 | Forb (G) | Immature fruit |
| *Stackhousia intermedia* | | 1 | 0.25 | Forb (G) | Flower |
| *Stylosanthes hamata* | * | 1 | 0.25 | Forb (G) | Flower |
| *Themeda triandra* | | 2 | 1 | Tussock grass (G) | Fruit |
| *Trigastrotheca molluginea* | | 1 | 0.1 | Forb (G) | Flower |
| *Triodia wiseana* | | 70 | 1.25 | Hummock grass (G) | Fruit |
| *Urochloa* sp. (indet) | | 1 | 0.25 | Tussock grass (G) | Dehisced fruit |
| *Waltheria indica* | | 1 | 0.75 | Forb (G) | Dehisced fruit |

| Sample ID: HC-08 | VT12 | Site: C |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 25/04/2024 | Described by J. Collins |
| **Coordinates:** | 127.6568967 | -18.22097627 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Brown gritty sand | **Aspect:** | Flat |
| **Drainage:** | Poor | **Vegetation condition:** | Good |
| **Bare ground:** | 15% | **Fire age and intensity:** | 5+ years |
| **Litter cover:** | 5% | **Disturbance:** | Weeds, rubbish & tracks present |



| HC-08 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Bothriochloa pertusa* | | 1 | 0.25 | Other grass (G) | Fruit |
| *Cenchrus ciliaris* | * | 75 | 1 | Tussock grass (G) | Fruit |
| *Clitoria ternatea* | * | 3 | 0.75 | Forb (G) | Flower |
| *Commelina ensifolia* | | 1 | 0.25 | Forb (G) | Flower |
| *Cyperus vaginatus* | | 2 | 1.5 | Sedge (G) | Fruit |
| *Eucalyptus victrix* | | 5 | 12 | Tree (U) | Fruit |
| *Flueggea virosa* subsp. *melanthesoides* | | 2 | 1.75 | Shrub (M) | Vegetative |
| *Heteropogon contortus* | | 15 | 1 | Tussock grass (G) | Fruit |

| HC-08 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Ipomoea nil* | * | 1 | 0.5 | Forb (G) | Flower |
| *Leucaena leucocephala* subsp. *leucocephala* | * | 15 | 6 | Shrub (M) | Fruit |
| *Melaleuca bracteata* | | 4 | 3 | Tree (U) | Fruit |
| *Nellica maderaspatensis* | | 1 | 0.25 | Forb (G) | Immature fruit |
| *Sesbania cannabina* | | 2 | 1.5 | Forb (G) | Immature fruit |
| *Urochloa* sp. (indet) | | 2 | 0.25 | Tussock grass (G) | Dehisced fruit |

| Sample ID: HC-09 | VT11 | Site: C |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 25/04/2024 | Described by J. Collins |
| **Coordinates:** | 127.6575729 | -18.22182821 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Brown clay loam | **Aspect:** | Flat |
| **Drainage:** | Moderate | **Vegetation condition:** | Good |
| **Bare ground:** | 5% | **Fire age and intensity:** | 5+ years |
| **Litter cover:** | 2% | **Disturbance:** | Weeds, rubbish & tracks present |



| HC-09 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia colei* | | 1 | 0.5 | Shrub (M) | Vegetative |
| *Afrohybanthus aurantiacus* | | 1 | 0.25 | Forb (G) | Flower |
| *Aristida contorta* | | 1 | 0.25 | Tussock grass (G) | Fruit |
| *Arivela viscosa* | | 1 | 0.25 | Forb (G) | Immature fruit |
| *Capparis lasiantha* | | 20 | 3 | Shrub (M) | Vegetative |
| *Cenchrus ciliaris* | * | 3 | 1 | Tussock grass (G) | Fruit |
| *Chrysopogon pallidus* | | 20 | 1.5 | Tussock grass (G) | Immature fruit |
| *Corymbia ferruginea* subsp. *stypophylla* | | 2 | 8 | Tree (U) | Dehisced fruit |

| HC-09 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Crotalaria medicaginea var. neglecta* | | 1 | 0.25 | Forb (G) | Flower |
| *Eragrostis tenella* | * | 1 | 0.25 | Other grass (G) | Fruit |
| *Eremophila longifolia* | | 1 | 1.25 | Shrub (M) | Vegetative |
| *Eucalyptus alba* var. *australasica* | | 15 | 12 | Tree (U) | Fruit |
| *Eulalia aurea* | | 2 | 1 | Tussock grass (G) | Fruit |
| *Euphorbia schultzii* var. *schultzii* | | 1 | 0.1 | Forb (G) | Fruit |
| *Euploca cunninghamii* | | 1 | 0.1 | Forb (G) | Flower |
| *Evolvulus alsinoides var. villosicalyx* | | 1 | 0.1 | Forb (G) | Fruit |
| *Gossypium australe* | | 1 | 0.5 | Shrub (M) | Flower |
| *Heteropogon contortus* | | 46 | 1.75 | Tussock grass (G) | Fruit |
| *Indigastrum parviflorum* | | 1 | 0.5 | Forb (G) | Immature fruit |
| *Indigofera colutea* | | 1 | 0.1 | Forb (G) | Flowerbud |
| *Indigofera linifolia* | | 1 | 0.25 | Forb (G) | Flower |
| *Indigofera linnaei* | | 1 | 0.1 | Forb (G) | Flowerbud |
| *Lysiphyllum cunninghamii* | | 4 | 6 | Tree (U) | Vegetative |
| *Perotis rara* | | 1 | 0.25 | Tussock grass (G) | Fruit |
| *Portulaca oleracea* | | 1 | 0.1 | Forb (G) | Vegetative |
| *Ptilotus exaltatus* | | 1 | 0.25 | Forb (G) | Flowerbud |
| *Rhynchosia minima* | | 1 | 0.25 | Forb (G) | Vegetative |
| *Salsola australis* | | 1 | 0.25 | Chenopod shrub(M) | Immature fruit |
| *Stylosanthes hamata* | * | 1 | 0.25 | Forb (G) | Flower |
| *Thaumastochloa major* | | 1 | 0.1 | Other grass (G) | Fruit |
| *Trianthema triquetrum* | | 1 | 0.25 | Forb (G) | Flower |
| *Triodia wiseana* | | 2 | 1.25 | Hummock grass (G) | Fruit |
| *Urochloa* sp. (indet) | | 30 | 0.25 | Tussock grass (G) | Dehisced fruit |

| Sample ID: HC-10 | VT10 | Site: C |
|---|---|---|
| **Type:** | Quadrat | 50 x 50 m |
| **Date:** | 25/04/2024 | Described by J. Collins |
| **Coordinates:** | 127.6551986 | -18.22786315 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Brown sandy loam | **Aspect:** | North |
| **Drainage:** | Good | **Vegetation condition:** | Very good |
| **Bare ground:** | 10% | **Fire age and intensity:** | 1+ years |
| **Litter cover:** | 3% | **Disturbance:** | Occasional rubbish |



| HC-10 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia adoxa* | | 1 | 0.25 | Shrub (M) | Flower |
| *Acacia colei* | | 1 | 0.1 | Shrub (M) | Vegetative |
| *Acacia tenuissima* | | 2 | 1.75 | Shrub (M) | Flower |
| *Aristida pruinosa* | | 2 | 1.5 | Tussock grass (G) | Fruit |
| *Cassytha filiformis* | | 1 | 0.25 | Forb (G) | Immature fruit |
| *Crotalaria medicaginea* var. *neglecta* | | 1 | 0.25 | Forb (G) | Flower |
| *Cymbopogon procerus* | | 1 | 1 | Tussock grass (G) | Fruit |
| *Eriachne ciliata* | | 1 | 0.1 | Other grass (G) | Fruit |

| HC-10 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Eucalyptus alba* var. *australasica* | | 25 | 10 | Tree (U) | Fruit |
| *Eulalia aurea* | | 5 | 1 | Tussock grass (G) | Fruit |
| *Fimbristylis dichotoma* | | 3 | 0.1 | Sedge (G) | Fruit |
| *Goodenia* sp. (indet) | | 1 | 0.1 | Forb (G) | Flower |
| *Hakea lorea* | | 1 | 0.5 | Shrub (M) | Vegetative |
| *Polycarpaea holtzei* | | 1 | 0.1 | Forb (G) | Flower |
| *Polycarpaea longiflora* | | 1 | 0.1 | Forb (G) | Flower |
| *Polygala galeocephala* | | 1 | 0.1 | Forb (G) | Immature fruit |
| *Ptilotus calostachyus* | | 1 | 0.25 | Forb (G) | Flower |
| *Ptilotus spicatus* | | 1 | 0.25 | Forb (G) | Fruit |
| *Schizachyrium fragile* | | 3 | 0.25 | Other grass (G) | Fruit |
| *Stackhousia intermedia* | | 1 | 0.25 | Forb (G) | Flower |
| *Tephrosia leptoclada* | | 1 | 0.25 | Forb (G) | Flower |
| *Trigastrotheca molluginea* | | 1 | 0.1 | Forb (G) | Flower |
| *Triodia wiseana* | | 40 | 0.25 | Hummock grass (G) | Dehisced fruit |

| Sample ID: HC-R11 | VT09 | Subsite C3 |
|---|---|---|
| **Type:** | Relevé | 50 x 50 m |
| **Date:** | 25/04/2024 | Described by R. Graham |
| **Coordinates:** | 127.6481364 | -18.24461331 |

| | | | |
|---|---|---|---|
| **Soil colour & type:** | Brown sandy loam | **Aspect:** | South |
| **Drainage:** | Good | **Vegetation condition:** | Excellent |
| **Bare ground:** | 3% | **Fire age and intensity:** | 5+ years |
| **Litter cover:** | 2% | **Disturbance:** | Negligible |



| HC-R11 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Acacia adoxa* | | 5 | 0.5 | Shrub (M) | Flower |
| *Acacia colei* | | 5 | 1.5 | Shrub (M) | Flowerbud |
| *Acacia trachycarpa* | | 80 | 2 | Shrub (M) | Flower |
| *Aristida pruinosa* | | 5 | 1.5 | Tussock grass (G) | Fruit |
| *Eriachne mucronata* | | 1 | 0.5 | Tussock grass (G) | Fruit |
| *Eucalyptus alba* var. *australasica* | | 5 | 8 | Tree (U) | Fruit |
| *Eulalia aurea* | | 2 | 1 | Tussock grass (G) | Fruit |
| *Grevillea pyramidalis* subsp. *pyramidalis* | | 1 | 2.75 | Shrub (M) | Dehisced fruit |

| HC-R11 Taxa | Status | Cover (%) | Height (m) | Form/Stratum | Reproductive State |
|---|---|---|---|---|---|
| *Ptilotus calostachyus* | | 1 | 0.25 | Forb (G) | Flower |
| *Ptilotus spicatus* | | 1 | 0.25 | Forb (G) | Fruit |
| *Triodia wiseana* | | 15 | 1.25 | Hummock grass (G) | Fruit |

**Broome significant flora**

| Taxon Name | Number of plants | Status | Zone | Easting | Northing |
|---|---|---|---|---|---|
| *Corymbia* ?paractia | 1 | P1 | 51K | 421533.2 | 8021359 |
| *Corymbia* ?paractia | 3 | P1 | 51K | 421711 | 8021482 |
| *Corymbia* ?paractia | 1 | P1 | 51K | 421040.2 | 8020861 |
| *Corymbia* ?paractia | 1 | P1 | 51K | 421021.5 | 8020842 |
| *Corymbia* ?paractia | 1 | P1 | 51K | 421403.4 | 8021193 |
| *Corymbia* ?paractia | 1 | P1 | 51K | 421046.1 | 8020865 |
| *Corymbia* ?paractia | 1 | P1 | 51K | 421540 | 8021354 |
| *Corymbia* ?paractia | 1 | P1 | 51K | 421539.2 | 8021338 |
| *Corymbia* ?paractia | 8 | P1 | 51K | 421029.7 | 8020837 |
| *Corymbia* ?paractia | 1 | P1 | 51K | 420971 | 8020797 |
| *Glycine pindanica* | 1 | P3 | 51K | 423072.7 | 8024008 |
| *Glycine pindanica* | 1 | P3 | 51K | 423420.2 | 8022378 |
| *Glycine pindanica* | 1 | P3 | 51K | 423300.5 | 8022840 |
| *Glycine pindanica* | 1 | P3 | 51K | 423347.2 | 8022656 |
| *Glycine pindanica* | 1 | P3 | 51K | 423349.7 | 8022635 |
| *Jacquemontia* sp. Broome (A.A. Mitchell 3028) | 1 | P1 | 51K | 422326.6 | 8021956 |
| *Jacquemontia* sp. Broome (A.A. Mitchell 3028) | 1 | P1 | 51K | 422321 | 8021951 |
| *Jacquemontia* sp. Broome (A.A. Mitchell 3028) | 20 | P1 | 51K | 423399.4 | 8024256 |
| *Jacquemontia* sp. Broome (A.A. Mitchell 3028) | 1 | P1 | 51K | 423634.8 | 8024259 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425122.4 | 8017699 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 426203 | 8017689 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 426202.8 | 8017689 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 426327.9 | 8017669 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425865.6 | 8017976 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 426530.2 | 8017910 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 426442.1 | 8017989 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425530.1 | 8019732 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 9 | P3 | 51K | 425689.3 | 8019721 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 5 | P3 | 51K | 425671.8 | 8019725 |

| Taxon Name | Number of plants | Status | Zone | Easting | Northing |
|---|---|---|---|---|---|
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 7 | P3 | 51K | 425710.6 | 8019722 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 6 | P3 | 51K | 425704.3 | 8019723 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 3 | P3 | 51K | 425720.8 | 8019723 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 2 | P3 | 51K | 424978.9 | 8019508 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 2 | P3 | 51K | 425222.9 | 8019016 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425696.9 | 8019026 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425011.1 | 8019360 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 2 | P3 | 51K | 425608.5 | 8019364 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425219.8 | 8018836 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 2 | P3 | 51K | 425273.7 | 8018887 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 2 | P3 | 51K | 425136.6 | 8018807 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 6 | P3 | 51K | 426387.3 | 8017807 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 426523.6 | 8017890 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 426358.3 | 8017823 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425696.4 | 8018866 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425452.3 | 8018828 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 422521.8 | 8022001 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 422342 | 8021969 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423433.7 | 8025462 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423434.7 | 8025446 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423425.6 | 8025630 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423427.2 | 8025550 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 3 | P3 | 51K | 423252.7 | 8024887 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 3 | P3 | 51K | 423297 | 8025074 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425519 | 8019503 |

| Taxon Name | Number of plants | Status | Zone | Easting | Northing |
|---|---|---|---|---|---|
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425219.6 | 8019513 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425834.1 | 8019569 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 3 | P3 | 51K | 425217.6 | 8019726 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 3 | P3 | 51K | 425202.4 | 8019590 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 5 | P3 | 51K | 425275.8 | 8019717 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 2 | P3 | 51K | 425272.7 | 8019718 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 3 | P3 | 51K | 425340.4 | 8019725 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423084.7 | 8024129 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423076.2 | 8024030 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423100.6 | 8024200 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423088.4 | 8024140 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423106.8 | 8024239 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423104 | 8024223 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423106 | 8024241 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424026.9 | 8022645 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424014.5 | 8022632 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424054.7 | 8022672 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424054.6 | 8022670 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424056.8 | 8022675 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424054.7 | 8022669 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424058.4 | 8022677 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424057.9 | 8022675 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424086 | 8022703 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424077.4 | 8022694 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424041.7 | 8022483 |

| Taxon Name | Number of plants | Status | Zone | Easting | Northing |
|---|---|---|---|---|---|
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424089.8 | 8022706 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423504.4 | 8022296 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423560.9 | 8022294 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423497.8 | 8022337 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423497.6 | 8022336 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423966.4 | 8022580 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423982.6 | 8022596 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423956.3 | 8022569 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423956.3 | 8022571 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423943.8 | 8022564 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423956.5 | 8022567 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423948.6 | 8022574 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423948.3 | 8022574 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423968.8 | 8022587 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423964.7 | 8022585 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423980.4 | 8022599 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423976.1 | 8022596 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423992 | 8022610 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423990.5 | 8022608 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424002.2 | 8022619 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423992.4 | 8022610 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423401.4 | 8025527 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423728.8 | 8022946 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423406.6 | 8025544 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424069.4 | 8022681 |

| Taxon Name | Number of plants | Status | Zone | Easting | Northing |
|---|---|---|---|---|---|
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424075.8 | 8022685 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424054.3 | 8022662 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424055.2 | 8022663 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424046 | 8022654 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424046.1 | 8022655 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424015.5 | 8022606 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424041.6 | 8022650 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423998 | 8022612 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424015.3 | 8022627 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423988.3 | 8022602 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423991.2 | 8022604 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423384.8 | 8025458 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423400.5 | 8025524 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423397.3 | 8025509 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423309.5 | 8022802 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423311 | 8022796 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423300.1 | 8022847 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423308.6 | 8022804 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423342 | 8022669 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423342.9 | 8022659 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423329.9 | 8022717 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423332.9 | 8022705 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423328.6 | 8022723 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423329.4 | 8022722 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423325.1 | 8022738 |

| Taxon Name | Number of plants | Status | Zone | Easting | Northing |
|---|---|---|---|---|---|
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423332.4 | 8022732 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423323.1 | 8022746 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423323.6 | 8022744 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423319.7 | 8022754 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423319.6 | 8022755 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423316.7 | 8022776 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423317 | 8022775 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423496.6 | 8022345 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423497.7 | 8022343 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423485.9 | 8022379 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423497.4 | 8022353 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423485.2 | 8022383 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423485.2 | 8022382 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423408.8 | 8022421 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423459.3 | 8022394 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423402.8 | 8022428 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423408.5 | 8022421 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423370.3 | 8022641 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423404.7 | 8022434 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423364.8 | 8022615 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423371.9 | 8022635 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423363 | 8022611 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423363.6 | 8022612 |
| *Terminalia kumpaja* | 3 | P3 | 51K | 423535.2 | 8024140 |
| ?Bonamia oblongifolia | 1 | P3 | 51K | 425413.1 | 8017858 |
| *Acacia monticola x tumida* var. *kulparn* | 1 | P3 | 51K | 426295.9 | 8017402 |

| Taxon Name | Number of plants | Status | Zone | Easting | Northing |
|---|---|---|---|---|---|
| *Bonamia oblongifolia* | 1 | P3 | 51K | 425479.3 | 8020643 |
| *Bonamia oblongifolia* | 1 | P3 | 51K | 425375.9 | 8020654 |
| *Bonamia oblongifolia* | 1 | P3 | 51K | 423988.1 | 8026917 |
| *Bonamia oblongifolia* | 1 | P3 | 51K | 423988.1 | 8026917 |
| *Corymbia* ?paractia | 1 | P1 | 51K | 421865.7 | 8021634 |
| *Corymbia* ?paractia | 2 | P1 | 51K | 421899.1 | 8021667 |
| *Corymbia* ?paractia | 1 | P1 | 51K | 421913.3 | 8021667 |
| *Corymbia* ?paractia | 2 | P1 | 51K | 421904.1 | 8021662 |
| *Corymbia* ?paractia | 1 | P1 | 51K | 421725.8 | 8021492 |
| *Corymbia* ?paractia | 1 | P1 | 51K | 421550.9 | 8021346 |
| *Corymbia* ?paractia | 1 | P1 | 51K | 421551.6 | 8021344 |
| *Corymbia* ?paractia | 1 | P1 | 51K | 421577 | 8021350 |
| *Corymbia* ?paractia | 1 | P1 | 51K | 421570.4 | 8021352 |
| *Corymbia* ?paractia | 1 | P1 | 51K | 421610.4 | 8021384 |
| *Corymbia* ?paractia | 1 | P1 | 51K | 421580 | 8021356 |
| *Corymbia* ?paractia | 1 | P1 | 51K | 421667.4 | 8021459 |
| *Corymbia* ?paractia | 1 | P1 | 51K | 421656.3 | 8021437 |
| *Corymbia* ?paractia | 1 | P1 | 51K | 421699.8 | 8021477 |
| *Corymbia* ?paractia | 1 | P1 | 51K | 421696.1 | 8021474 |
| *Glycine pindanica* | 1 | P3 | 51K | 423474.6 | 8025876 |
| *Glycine pindanica* | 1 | P3 | 51K | 423272.8 | 8024989 |
| *Glycine pindanica* | 1 | P3 | 51K | 423076.8 | 8024026 |
| *Glycine pindanica* | 1 | P3 | 51K | 423402.5 | 8025532 |
| *Glycine pindanica* | 1 | P3 | 51K | 423335.9 | 8025247 |
| *Glycine pindanica* | 1 | P3 | 51K | 423359.1 | 8025349 |
| *Glycine pindanica* | 1 | P3 | 51K | 423381.4 | 8025434 |
| *Glycine pindanica* | 1 | P3 | 51K | 423391.1 | 8025485 |
| *Jacquemontia* ?sp. Broome (A.A. Mitchell 3028) | 1 | P1 | 51K | 423483.1 | 8024340 |
| *Jacquemontia* sp. Broome (A.A. Mitchell 3028) | 1 | P1 | 51K | 425210.6 | 8020464 |
| *Jacquemontia* sp. Broome (A.A. Mitchell 3028) | 1 | P1 | 51K | 423810.4 | 8024772 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 426004.2 | 8017428 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 426285.2 | 8017423 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 426226.5 | 8017329 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425597.9 | 8017386 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 426318.6 | 8017325 |

| Taxon Name | Number of plants | Status | Zone | Easting | Northing |
|---|---|---|---|---|---|
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424995.3 | 8017400 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425053.9 | 8017311 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425157.1 | 8017395 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425990.9 | 8016938 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425184.6 | 8021944 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425186.2 | 8021961 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425186.8 | 8021957 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425208 | 8022020 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425192.9 | 8021977 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425229.8 | 8022200 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425212.9 | 8022068 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425223.3 | 8022226 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424133.8 | 8026992 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425747.6 | 8019723 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425476 | 8020511 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425274.6 | 8020492 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425670.1 | 8020531 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425531.8 | 8020485 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425745 | 8020541 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425724.6 | 8020527 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425562.8 | 8020633 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425651.7 | 8020627 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425436.8 | 8020645 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425416.7 | 8020648 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425434.9 | 8020646 |

| Taxon Name | Number of plants | Status | Zone | Easting | Northing |
|---|---|---|---|---|---|
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425373.9 | 8020652 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425306 | 8020655 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425497.4 | 8018601 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425204.8 | 8020085 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425124 | 8020084 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425673.6 | 8020081 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425330.5 | 8020085 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425314.6 | 8019982 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425695 | 8020080 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425253.2 | 8020472 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425209.5 | 8020464 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425419.9 | 8018262 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425834.4 | 8018440 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425616.4 | 8018261 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425630.9 | 8018672 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425113.2 | 8018430 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425867.1 | 8018777 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425761.1 | 8018675 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425412.1 | 8018828 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425541.5 | 8018821 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425152 | 8018823 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425315.4 | 8018823 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423928.9 | 8025654 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425408.1 | 8019029 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425547.6 | 8018516 |

| Taxon Name | Number of plants | Status | Zone | Easting | Northing |
|---|---|---|---|---|---|
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425185.1 | 8017173 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424177.6 | 8022306 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423478 | 8022791 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424419.2 | 8022343 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 422713.8 | 8022036 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 422692.9 | 8022039 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 422787.6 | 8022052 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 422777.6 | 8022049 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 422809.8 | 8022055 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 422806.9 | 8022055 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 422899.7 | 8022070 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 422831.4 | 8022058 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 422946.3 | 8022082 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 422926.8 | 8022076 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 422998.9 | 8022090 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 422960.6 | 8022082 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423125.8 | 8022114 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423081.4 | 8022108 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423142.3 | 8022114 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423135.6 | 8022114 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 421787.9 | 8021552 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 420808.7 | 8020491 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 421798.8 | 8021558 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 421772.7 | 8021543 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 421838.6 | 8021600 |

| Taxon Name | Number of plants | Status | Zone | Easting | Northing |
|---|---|---|---|---|---|
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 421831.1 | 8021593 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 421867.9 | 8021629 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 421878.8 | 8021662 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425080.9 | 8021500 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425164.3 | 8021822 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425127.5 | 8021676 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425178.9 | 8021918 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425162.7 | 8021850 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425183.8 | 8021927 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 425222.6 | 8022241 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423493.2 | 8025940 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423488.5 | 8025902 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423561.4 | 8026206 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423504.8 | 8025993 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423573.3 | 8026225 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424632 | 8027170 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423961.1 | 8027261 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423617.2 | 8024712 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423441.1 | 8024712 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423932 | 8024874 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423850.2 | 8024710 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423835.9 | 8024899 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424252.7 | 8025634 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423986 | 8022593 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423833.7 | 8025641 |

| Taxon Name | Number of plants | Status | Zone | Easting | Northing |
|---|---|---|---|---|---|
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423674.5 | 8023580 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423568.5 | 8025091 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423799.7 | 8024515 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423628.5 | 8025283 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423744.7 | 8025102 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423253.3 | 8024881 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423190.3 | 8024633 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423262.5 | 8024932 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423295.4 | 8025073 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423275.8 | 8025000 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423301.8 | 8025111 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423296 | 8025073 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423317.1 | 8025156 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423310.3 | 8025132 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423319.7 | 8025178 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423316.8 | 8025156 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423327.9 | 8025211 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423325.6 | 8025197 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423330.7 | 8025220 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423330.9 | 8025219 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423076.3 | 8023784 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423080.4 | 8023764 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423068.9 | 8023836 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423075.8 | 8023784 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423072.7 | 8023970 |

| Taxon Name | Number of plants | Status | Zone | Easting | Northing |
|---|---|---|---|---|---|
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423073.2 | 8023969 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423163.8 | 8024524 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423447.4 | 8022272 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423446.7 | 8022275 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423450.2 | 8022293 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423453.4 | 8022285 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423443.1 | 8022325 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423443.8 | 8022321 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423436.8 | 8022333 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423441.1 | 8022330 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423430.3 | 8022351 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423434.2 | 8022345 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423126.4 | 8023559 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423097.4 | 8023686 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423096.1 | 8023682 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423082.9 | 8023749 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423089.9 | 8023709 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423986.1 | 8026918 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423414.7 | 8022374 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423441.8 | 8022303 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423441.3 | 8022314 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423333.8 | 8025233 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423355.1 | 8025320 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423355.2 | 8025318 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423358 | 8025327 |

| Taxon Name | Number of plants | Status | Zone | Easting | Northing |
|---|---|---|---|---|---|
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423368.4 | 8025393 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423359.5 | 8025350 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423375.8 | 8025418 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423368.8 | 8025396 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423381.2 | 8025430 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423213.9 | 8023187 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423382.9 | 8022363 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423107.9 | 8024160 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423118.1 | 8024205 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423115.9 | 8024215 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423116.4 | 8024211 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423118.4 | 8024255 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423118.4 | 8024221 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423124.3 | 8024252 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423118.6 | 8024210 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423123.5 | 8024279 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423122.9 | 8024278 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423346.4 | 8025247 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423123.6 | 8024298 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423348.1 | 8025222 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423347.4 | 8025240 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423281.4 | 8022914 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424034.5 | 8026885 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423300.9 | 8022840 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423413 | 8022171 |

| Taxon Name | Number of plants | Status | Zone | Easting | Northing |
|---|---|---|---|---|---|
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423422.5 | 8022210 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423419.4 | 8022235 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423413.3 | 8022174 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423417.8 | 8022254 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423417.4 | 8022249 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423410.1 | 8022268 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423417.3 | 8022253 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 420419.1 | 8019505 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 420405.2 | 8019486 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 420452.4 | 8019585 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 420443.6 | 8019569 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 420462.9 | 8019613 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 420458.9 | 8019609 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 420515.5 | 8019737 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 420513.4 | 8019736 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 420517.4 | 8019787 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 420515.4 | 8019740 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 420531.3 | 8019785 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 420518.2 | 8019786 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 420789.9 | 8020446 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 420658.7 | 8020110 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423790.3 | 8022622 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423364.6 | 8022616 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 419418.6 | 8017393 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423719 | 8026745 |

| Taxon Name | Number of plants | Status | Zone | Easting | Northing |
|---|---|---|---|---|---|
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 420315.5 | 8019287 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 420221.5 | 8019038 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 420265 | 8019121 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 420296.9 | 8019233 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 420284.9 | 8019167 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 420276.2 | 8019160 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 420303 | 8019249 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 420297.9 | 8019245 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 420354.5 | 8019392 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 420313 | 8019284 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423357.1 | 8025227 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423349.1 | 8025214 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423355.5 | 8025244 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423357.5 | 8025231 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423356.2 | 8025267 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423355.4 | 8025264 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424095.4 | 8022702 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423354.3 | 8025278 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424102.6 | 8022708 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424101.3 | 8022706 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424112.6 | 8022722 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424108.5 | 8022713 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424161.1 | 8022767 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424156.2 | 8022764 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423365.9 | 8022579 |

| Taxon Name | Number of plants | Status | Zone | Easting | Northing |
|---|---|---|---|---|---|
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424190 | 8022803 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424238.9 | 8022837 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423989.4 | 8022813 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423266.1 | 8023147 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423275.7 | 8023119 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423191.2 | 8023462 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423261.3 | 8023157 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423175.1 | 8023512 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423183.6 | 8023480 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423156.3 | 8023558 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423176.2 | 8023512 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423140.9 | 8023589 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423145.2 | 8023581 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423096.8 | 8023698 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423137 | 8023596 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423084.2 | 8023755 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423384.1 | 8022165 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423165.1 | 8022122 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423533.1 | 8022200 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423512.4 | 8022210 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423722.4 | 8022219 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423723.9 | 8022216 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423866.4 | 8022247 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423705.6 | 8022226 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424028.7 | 8022270 |

| Taxon Name | Number of plants | Status | Zone | Easting | Northing |
|---|---|---|---|---|---|
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423870.5 | 8022249 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424198.2 | 8022298 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424010.8 | 8022274 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 424386.5 | 8022325 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 3 | P3 | 51K | 425839.5 | 8019605 |
| *Polymeria* sp. Broome (K.F. Kenneally 9759) | 1 | P3 | 51K | 423484.5 | 8025898 |
| *Terminalia kumpaja* | 12 | P3 | 51K | 425218.2 | 8017609 |

**Derby significant flora species list**

| Taxon Name | Number of plants | Status | Zone | Easting | Northing |
|---|---|---|---|---|---|
| *Haemodorum capitatum* | 20 | P1 | 51K | 570747.5 | 8082563.8 |
| *Haemodorum capitatum* | 20 | P1 | 51K | 570752.3 | 8082566.9 |
| *Haemodorum capitatum* | 20 | P1 | 51K | 570752.5 | 8082580.2 |
| *Haemodorum capitatum* | 20 | P1 | 51K | 570761.4 | 8082583.1 |
| *Haemodorum capitatum* | 20 | P1 | 51K | 570750.2 | 8082625.9 |

**Camballin/Looma significant flora species list**

| Taxon Name | Number of plants | Status | Zone | Easting | Northing |
|---|---|---|---|---|---|
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 3 | P3 | 51K | 622900.3 | 8006395.0 |
| *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | 5 | P3 | 51K | 622955.0 | 8006241.7 |

**Halls Creek significant flora species list**

| Taxon Name | Number of plants | Status | Zone | Easting | Northing |
|---|---|---|---|---|---|
| *Goodenia crenata* | 1 | P3 | 51K | 357779.0 | 7982499.4 |
| *Goodenia crenata* | 1 | P3 | 51K | 357708.1 | 7982258.4 |
| *Goodenia crenata* | 1 | P3 | 51K | 356593.4 | 7982265.9 |

**Broome species presence by site**

| Family | Species | Status | Site F | Site G | Site H | Site F Connection | Site G&H Connection |
|---|---|---|---|---|---|---|---|
| Acanthaceae | *Avicennia marina* subsp. *marina* | | | | | X | |
| Aizoaceae | *Sesuvium portulacastrum* subsp. *portulacastrum* | | | | | X | |
| Aizoaceae | *Trianthema pilosum* | | | | | X | |
| Amaranthaceae | Amaranthaceae sp. (indet) | | | | | | X |
| Amaranthaceae | *Ptilotus exaltatus* | | X | | | X | |
| Amaranthaceae | *Ptilotus polystachyus* | | | | | X | X |
| Apocynaceae | *Alstonia linearis* | | | | X | X | |
| Apocynaceae | *Calotropis gigantea* | * | | | | X | |
| Apocynaceae | *Carissa lanceolata* | | X | X | X | | |
| Apocynaceae | *Gymnema erectum* | | X | | | | |
| Apocynaceae | *?Leichhardtia viridiflora* subsp. *tropica* | | X | | | | |
| Apocynaceae | *?Vincetoxicum carnosum* | | X | | | | |
| Apocynaceae | *Wrightia saligna* | | X | | | | |
| Asteraceae | *Pluchea tetranthera* | | | | | | X |
| Asteraceae | *Pterocaulon ?intermedium* | | X | X | X | X | X |
| Bignoniaceae | *Dolichandrone occidentalis* | | X | X | X | X | X |
| Boraginaceae | *Euploca leptalea* | | X | | | | X |
| Boraginaceae | *Ehretia saligna* var. *saligna* | | X | X | X | X | X |
| Boraginaceae | *Trichodesma zeylanicum* var. *latisepaleum* | | X | X | X | X | X |
| Capparaceae | *Capparis lasiantha* | | | | X | | |
| Celastraceae | *Denhamia cunninghamii* | | X | X | X | | |
| Chenopodiaceae | *Neobassia astrocarpa* | | | | | X | |
| Chenopodiaceae | *Tecticornia ?pergranulata* subsp. *elongata* | | | | | X | |
| Combretaceae | *Terminalia kumpaja* | P3 | X | | X | | |
| Commelinaceae | *Murdannia graminea* | | X | | | X | |
| Convolvulaceae | *Bonamia linearis* | | X | | | X | |

| Family | Species | Status | Site F | Site G | Site H | Site F Connection | Site G&H Connection |
|---|---|---|---|---|---|---|---|
| Convolvulaceae | *Distimake dissectus* var. *dissectus* | * | | | | X | |
| Convolvulaceae | *?Bonamia oblongifolia* | P3 | | | X | | |
| Convolvulaceae | *Bonamia oblongifolia* | P3 | X | X | | | X |
| Convolvulaceae | *Evolvulus alsinoides* var. *decumbens* | | X | X | X | | |
| Convolvulaceae | *Jacquemontia paniculata* | | | | | X | |
| Convolvulaceae | *Jacquemontia* sp. Broome (A.A. Mitchell 3028) | P1 | X | X | | X | |
| Convolvulaceae | *Jacquemontia ?*sp. Broome (A.A. Mitchell 3028) | P1 | X | | | | |
| Convolvulaceae | *Polymeria* sp. Broome (K.F. Kenneally 9759) | P3 | X | X | | X | X |
| Convolvulaceae | *Polymeria ?*sp. Broome (K.F. Kenneally 9759) | P3 | X | X | X | | X |
| Cucurbitaceae | *Cucumis variabilis* | | X | X | | | |
| Cyperaceae | *Abildgaardia oxystachya* | | | | | X | |
| Cyperaceae | *Cyperus conicus* | | | | | X | |
| Cyperaceae | *Fimbristylis ?rara* | | | | | X | |
| Droseraceae | *Drosera broomensis* | | | | | X | |
| Euphorbiaceae | *Euphorbia psilosperma* | | X | | | X | |
| Euphorbiaceae | *Euphorbia vaccaria* var. *vaccaria* | | | | | | X |
| Fabaceae | *Acacia adoxa* var. *subglabra* | | X | X | X | | X |
| Fabaceae | *Acacia colei* var. *colei* | | X | X | X | X | X |
| Fabaceae | *Acacia eriopoda* | | X | X | X | X | |
| Fabaceae | *Acacia eriopoda x tumida* var. *tumida* | | X | X | X | | X |
| Fabaceae | *Acacia ?eriopoda x tumida* var. *tumida* | | X | | X | | |
| Fabaceae | *Acacia monticola x tumida* var. *kulparn* | P3 | | | X | | |
| Fabaceae | *Acacia platycarpa* | | X | X | X | X | |
| Fabaceae | *Acacia ?stipuligera* | | X | | | | |
| Fabaceae | *Acacia tumida* var. *?kulparn* | | | X | | | |
| Fabaceae | *Acacia ?tumida* var. *tumida* | | | X | X | | |

| Family | Species | Status | Site F | Site G | Site H | Site F Connection | Site G&H Connection |
|---|---|---|---|---|---|---|---|
| Fabaceae | *Acacia tumida* | | X | | | | |
| Fabaceae | *Acacia tumida* var. *kulparn* | | X | | | | |
| Fabaceae | *Cajanus marmoratus* | | X | X | X | X | |
| Fabaceae | *Chamaecrista moorei* | | X | | | | |
| Fabaceae | *Chamaecrista symonii* | | X | | | | X |
| Fabaceae | *Crotalaria medicaginea* var. *neglecta* | | X | | X | X | X |
| Fabaceae | *Cullen martinii* | | | | | X | |
| Fabaceae | *Erythrophleum arenarium* | | X | | | | |
| Fabaceae | *Leucaena leucocephala* | * | | | X | | |
| Fabaceae | *Galactia tenuiflora* | | | | | | X |
| Fabaceae | *Glycine pindanica* | | X | | | X | |
| Fabaceae | *Glycine tomentella* | | X | X | X | X | |
| Fabaceae | *Grona filiformis* | | | | | | X |
| Fabaceae | *Indigofera colutea* | | | | | X | X |
| Fabaceae | *Indigofera linifolia* | | | | | X | |
| Fabaceae | *Lysiphyllum cunninghamii* | | X | X | X | X | |
| Fabaceae | *Neptunia ?major* | RE | | | | X | |
| Fabaceae | *Senna costata* | | X | | | | |
| Fabaceae | *Senna notabilis* | | | | | X | X |
| Fabaceae | *Stylosanthes hamata* | * | X | | | X | |
| Fabaceae | *Stylosanthes scabra* | * | | | | | X |
| Fabaceae | *Tephrosia crocea* | | | | X | | |
| Fabaceae | *Tephrosia crocea* s. lat | | | | | | X |
| Fabaceae | *Tephrosia leptoclada* | | | | | X | X |
| Fabaceae | *Tephrosia remotiflora* | | X | | | | |
| Fabaceae | *Tephrosia* sp. D Kimberley Flora (R.D. Royce 1848) | | X | | | | |

| Family | Species | Status | Site F | Site G | Site H | Site F Connection | Site G&H Connection |
|---|---|---|---|---|---|---|---|
| Fabaceae | *Zornia chaetophora* | | X | | X | | |
| Goodeniaceae | *Goodenia lamprosperma* | | | | | X | |
| Goodeniaceae | *Goodenia panduriformis* | | X | | | | |
| Goodeniaceae | *Goodenia sepalosa* var. *sepalosa* | | X | | | | |
| Goodeniaceae | *Scaevola parvifolia* subsp. *parvifolia* | | | | X | | |
| Gyrostemonaceae | *Codonocarpus cotinifolius* | | X | | | | |
| Hemerocallidaceae | *Corynotheca gracilis* | | X | | X | | |
| Hernandiaceae | *Gyrocarpus americanus* subsp. *americanus* | RE | X | | | | |
| Hernandiaceae | *Gyrocarpus americanus* subsp. *pachyphyllus* | | X | | X | X | |
| Hernandiaceae | *Gyrostemon tepperi* | | X | X | X | | |
| Lamiaceae | *Clerodendrum floribundum* | | X | | | | |
| Lamiaceae | *Clerodendrum floribundum* var. *ovatum* | | X | | | | |
| Lamiaceae | *Clerodendrum tomentosum* var. *mollissima* | | X | | | | |
| Lamiaceae | *Mesosphaerum suaveolens* | * | | | X | X | |
| Lamiaceae | *Ocimum basilicum* | * | | | X | X | |
| Lamiaceae | *Premna acuminata* | | X | X | | | |
| Lauraceae | *Cassytha capillaris* | | X | X | X | | |
| Lecythidaceae | *Planchonia careya* | | X | X | X | X | |
| Linderniaceae | *Lindernia ?aplectra* | | | | | X | |
| Loranthaceae | *Lysiana spathulata* subsp. *spathulata* | | | X | X | | |
| Malvaceae | *Abutilon otocarpum* | | X | | | X | X |
| Malvaceae | *Abutilon sp.* (indet) | | X | | | | |
| Malvaceae | *Brachychiton ?diversifolius* subsp. *diversifolius* | | X | | X | | |
| Malvaceae | *Brachychiton diversifolius* subsp. *diversifolius* | | X | X | X | X | X |
| Malvaceae | *?Brachychiton diversifolius* subsp. *diversifolius* | | | X | | | |
| Malvaceae | *Corchorus ?sidoides* subsp. *sidoides* | | X | X | X | | |

| Family | Species | Status | Site F | Site G | Site H | Site F Connection | Site G&H Connection |
|---|---|---|---|---|---|---|---|
| Malvaceae | *Corchorus sidoides* subsp. *sidoides* | | X | | | X | |
| Malvaceae | *Gossypium australe* | | X | | X | | |
| Malvaceae | *Grewia pindanica* | | X | | | X | |
| Malvaceae | *Hibiscus apodus* | | | | | X | |
| Malvaceae | *Hibiscus leptocladus* | | | | X | | |
| Malvaceae | *Melhania oblongifolia* | | X | | | | |
| Malvaceae | *Sida rohlenae* subsp. *occidentalis* | | X | | X | | X |
| Malvaceae | *Sida* sp. (indet) | | X | | | | |
| Malvaceae | *?Sida* sp. (indet) | | | X | | | |
| Malvaceae | *Sida* sp. Pindan (B.G. Thomson 3398) | | X | | | | |
| Malvaceae | *Waltheria indica* | | X | X | X | X | X |
| Meliaceae | *Azadirachta indica* | * | | | X | X | |
| Menispermaceae | *Tinospora smilacina* | | X | X | | X | |
| Moraceae | *Ficus aculeata* var. *indecora* | | X | X | X | X | X |
| Myrtaceae | *Corymbia ?confertiflora* | | | | | X | |
| Myrtaceae | *Corymbia dendromerinx* | | X | | | | |
| Myrtaceae | *Corymbia flavescens* | | | | | X | |
| Myrtaceae | *Corymbia ?flavescens* | | X | X | X | X | X |
| Myrtaceae | *Corymbia greeniana* | | X | X | X | X | |
| Myrtaceae | *Corymbia ?paractia* | P1 | | | | X | |
| Myrtaceae | *Corymbia polycarpa* | | | | | X | |
| Myrtaceae | *Corymbia* sp. (indet) | | | | | X | |
| Myrtaceae | *Corymbia zygophylla* | | X | X | X | | X |
| Myrtaceae | *Eucalyptus tectifica* | | | X | | X | |
| Myrtaceae | *Melaleuca ?glomerata* | RE | | | | X | |
| Myrtaceae | *Melaleuca cajuputi* subsp. *cajuputi* | | | | | X | |

| Family | Species | Status | Site F | Site G | Site H | Site F Connection | Site G&H Connection |
|---|---|---|---|---|---|---|---|
| Nyctaginaceae | *Boerhavia coccinea* | | | | | X | |
| Oleaceae | *Jasminum didymum* subsp. *lineare* | | X | X | X | X | X |
| Orobanchaceae | *Buchnera ?ramosissima* | | X | | | | |
| Orobanchaceae | *Buchnera* sp. (indet) | | | X | | | |
| Passifloraceae | *Passiflora foetida* var. *hispida* | * | | | X | X | |
| Phyllanthaceae | *Breynia cernua* | | X | | | X | |
| Phyllanthaceae | *Flueggea virosa* subsp. *melanthesoides* | | X | X | X | | |
| Phyllanthaceae | *Kirganelia baccata* | | X | | | X | |
| Phyllanthaceae | *?Kirganelia baccata* | | | | X | | |
| Phyllanthaceae | *Synostemon lissocarpus* | | X | | | | |
| Poaceae | *Aristida holathera* var. *holathera* | | | X | | | |
| Poaceae | *Aristida holathera* var. *latifolia* | | X | | X | | |
| Poaceae | *Aristida inaequiglumis* | | | | | X | |
| Poaceae | *Aristida* sp. (indet) | | X | | X | X | |
| Poaceae | *?Aristida* sp. (indet) | | | | X | | |
| Poaceae | *Cenchrus biflorus* | * | | | | X | |
| Poaceae | *Cenchrus ciliaris* | * | X | | | | |
| Poaceae | *Cenchrus* sp. (indet) | | | | | X | |
| Poaceae | *Chrysopogon ?pallidus* | | X | | | | |
| Poaceae | *Chrysopogon pallidus* | | X | | | X | |
| Poaceae | *Cynodon ?dactylon* | * | | | | X | |
| Poaceae | *Cynodon convergens* | | | | | X | |
| Poaceae | *Dactyloctenium radulans* | | | | | X | |
| Poaceae | *?Digitaria brownii* | | X | | | | |
| Poaceae | *Digitaria ciliaris* | * | | | | | X |
| Poaceae | *Eragrostis eriopoda* | | X | | X | | |

| Family | Species | Status | Site F | Site G | Site H | Site F Connection | Site G&H Connection |
|---|---|---|---|---|---|---|---|
| Poaceae | *Eragrostis falcata* | | | X | X | | |
| Poaceae | *Eragrostis* sp. (indet) | | X | | | | |
| Poaceae | *Eragrostis speciosa* | | | | | X | |
| Poaceae | *Eriachne obtusa* | | X | | | | |
| Poaceae | *Paspalidium rarum* | | | | | X | |
| Poaceae | Poaceae sp. (indet) | | X | X | X | | X |
| Poaceae | *Sorghum plumosum* | | X | | | | |
| Poaceae | *Sorghum* sp. (indet) | | | | | X | |
| Poaceae | *Triodia ?caelestialis* | | | X | X | | |
| Poaceae | *Triodia caelestialis* | | X | X | X | | X |
| Poaceae | *Triodia epactia* | | X | | | | |
| Poaceae | *Urochloa trichopus* | * | | | | X | |
| Poaceae | *Xerochloa imberbis* | | | | | X | |
| Proteaceae | *Grevillea pyramidalis* subsp. *pyramidalis* | | X | X | X | | |
| Proteaceae | *Grevillea refracta* subsp. *refracta* | | X | X | X | | |
| Proteaceae | *Hakea arborescens* | | | X | | | |
| Proteaceae | *Hakea macrocarpa* | | X | X | X | | |
| Proteaceae | *Persoonia falcata* | | X | X | X | X | X |
| Rhamnaceae | *Ventilago viminalis* | | X | X | X | | |
| Rhizophoraceae | *?Ceriops australis* | | | | | X | |
| Rubiaceae | *Dentella* ?asperata | | | | | X | |
| Rubiaceae | *Gardenia pyriformis* subsp. *keartlandii* | | X | X | X | | |
| Rubiaceae | *Pavetta kimberleyana* | | | | X | | |
| Rubiaceae | *Spermacoce occidentalis* | | X | X | X | | |
| Santalaceae | *Santalum lanceolatum* | | X | X | X | X | |
| Sapindaceae | *Dodonaea hispidula* var. *arida* | | X | X | X | | X |
| Sapotaceae | *Sersalisia sericea* | | X | | | | |

| Family | Species | Status | Site F | Site G | Site H | Site F Connection | Site G&H Connection |
|---|---|---|---|---|---|---|---|
| Solanaceae | *Solanum cunninghamii* | | X | X | X | | X |
| Solanaceae | *Solanum dioicum* | | X | | | | |
| Solanaceae | *Solanum* sp. (indet) | | X | | | | |
| Violaceae | *Afrohybanthus aurantiacus* | | X | X | X | | |
| Zygophyllaceae | *Tribulopis angustifolia* | | | | | X | |

**Derby Species by site**

| Family | Species | Status | Site D | Site I | Site O | Site P | Site C | Connection Route |
|---|---|---|---|---|---|---|---|---|
| Aizoaceae | *Trianthema pilosum* | | X | | | | X | |
| Amaranthaceae | *Ptilotus lanatus* | | X | | X | | | |
| Amaranthaceae | *Ptilotus polystachyus* | | | | | | | |
| Apocynaceae | *Alstonia linearis* | | X | X | X | X | X | |
| Apocynaceae | *Calotropis gigantea* | * | X | X | X | X | X | |
| Apocynaceae | *Carissa lanceolata* | | | | | | | X |
| Apocynaceae | *Cynanchum floribundum* | | X | X | | X | X | X |
| Apocynaceae | *Cynanchum viminale* subsp. *australe* | | X | | | | | |
| Asteraceae | *Bidens bipinnata* | * | X | X | | X | | |
| Asteraceae | *Pterocaulon* sp. (indet) | | X | X | X | X | X | |
| Bixaceae | *Cochlospermum fraseri* | | X | X | | | | X |
| Boraginaceae | *Ehretia saligna* var. *saligna* | | X | X | X | | | |
| Boraginaceae | *Euploca cunninghamii* | | | | | | X | |
| Boraginaceae | *Euploca diversifolia* | | X | X | | X | | |
| Boraginaceae | *Euploca leptalea* | | X | X | | | X | |
| Boraginaceae | *Euploca ovalifolia* | | | | | | X | |
| Boraginaceae | *Trichodesma zeylanicum* var. latisepaleum | | X | | | X | X | X |
| Capparaceae | *Capparis lasiantha* | | X | | | X | | |
| Capparaceae | *Capparis spinosa* subsp. *nummularia* | | X | | | | | |
| Cleomaceae | *Arivela viscosa* | | | | | | X | |
| Combretaceae | *Terminalia* ?platyphylla | | X | X | | | | |
| Combretaceae | *Terminalia canescens* | | X | X | | X | X | X |
| Combretaceae | *Terminalia volucris* | | | | | X | | |
| Commelinaceae | *Murdannia graminea* | | X | X | | | X | |
| Convolvulaceae | *Bonamia pannosa* | | | | | X | | |
| Convolvulaceae | *Bonamia* sp. (indet) | | | | | | | X |

| Family | Species | Status | Site D | Site I | Site O | Site P | Site C | Connection Route |
|---|---|---|---|---|---|---|---|---|
| Convolvulaceae | *Distimake dissectus* var. *dissectus* | * | | | | X | | |
| Convolvulaceae | *Evolvulus alsinoides* subsp. *villosicalyx* | | X | | X | X | X | |
| Cucurbitaceae | *Cucumis variabilis* | | | | | | X | |
| Cyperaceae | *Bulbostylis barbata* | | X | X | X | | X | |
| Cyperaceae | *Cyperus pulchellus* | | X | | | | | |
| Cyperaceae | *Fimbristylis* ?neilsonii | | X | X | | | | |
| Cyperaceae | *Fimbristylis* sp. (indet) | | X | | | | | |
| Cyperaceae | *Fimbristylis tetragona* | | | | | | X | |
| Droseraceae | *Drosera derbyensis* | | X | | | | | X |
| Euphorbiaceae | *Euphorbia coghlanii* | | | | | | X | |
| Euphorbiaceae | *Jatropha gossypifolia* | DP/WONS* | | | | | X | |
| Euphorbiaceae | *Microstachys chamaelea* | | | | | | X | |
| Fabaceae | *Abrus precatorius* | | | | X | X | | |
| Fabaceae | *Acacia colei* var. *colei* | | X | X | | | | |
| Fabaceae | *Acacia latifolia* | | | | | | X | |
| Fabaceae | *Acacia monticola* | | X | X | | X | | |
| Fabaceae | *Acacia plectocarpa* subsp. *plectocarpa* | | X | X | | X | | X |
| Fabaceae | *Acacia tumida* var. *kulparn* | | X | X | X | X | X | X |
| Fabaceae | *Clitoria ternatea* | * | | | | X | | |
| Fabaceae | *Erythrophleum chlorostachys* | | X | | | | | |
| Fabaceae | *Glycine tomentella* | | | | | | X | |
| Fabaceae | *Grona filiformis* | | | | | X | | |
| Fabaceae | *Indigofera linnaei* | | | | | X | | |
| Fabaceae | *Lysiphyllum cunninghamii* | | X | X | X | X | X | X |
| Fabaceae | *Neptunia scutata* | | | | | X | | |
| Fabaceae | *Rhynchosia minima* | | | | | X | | |
| Fabaceae | *Senna costata* | | X | | | | | |

| Family | Species | Status | Site D | Site I | Site O | Site P | Site C | Connection Route |
|---|---|---|---|---|---|---|---|---|
| Fabaceae | *Senna notabilis* | | | | | X | | |
| Fabaceae | *Senna venusta* | | X | | | | | |
| Fabaceae | *Sesbania cannabina* | | | | | X | | |
| Fabaceae | *Stylosanthes hamata* | * | | | | X | | |
| Fabaceae | *Tephrosia brachyodon* var. *longifolia* | | | | | | X | |
| Fabaceae | *Tephrosia remotiflora* | | | | | | X | |
| Fabaceae | *Tephrosia* sp. D Kimberley Flora (R.D. Royce 1848) | | X | | | | | |
| Fabaceae | *Vigna lanceolata* | | | | X | X | | |
| Fabaceae | *Zornia chaetophora* | | | | | | X | |
| Fabaceae | *Zornia prostrata* | | X | X | | | X | X |
| Goodeniaceae | *Goodenia heppleana* | | | | | | X | |
| Goodeniaceae | *Goodenia lamprosperma* | | | | | | | |
| Haemodoraceae | *Haemodorum capitatum* | P1/RE | X | | | | | |
| Hernandiaceae | *Gyrocarpus americanus* subsp. *americanus* | RE | X | X | | | X | |
| Hernandiaceae | *Gyrocarpus americanus* subsp. *pachyphyllus* | | X | | | | X | |
| Lamiaceae | *Ocimum basilicum* | * | X | X | X | X | | |
| Lamiaceae | *Premna acuminata* | | | | X | | | |
| Lauraceae | *Cassytha filiformis* | | X | | | | | |
| Lecythidaceae | *Planchonia careya* | | X | | | X | X | |
| Malvaceae | *Abutilon hannii* | | X | | | X | X | |
| Malvaceae | *Abutilon leucopetalum* | | X | | | | | |
| Malvaceae | *Abutilon otocarpum* | | | | | X | | |
| Malvaceae | *Abutilon* sp. (indet) | | X | | | X | | |
| Malvaceae | *Adansonia gregorii* | | X | X | X | X | X | X |
| Malvaceae | *Brachychiton diversifolius* subsp. *diversifolius* | | X | X | | | X | |
| Malvaceae | *Corchorus sidoides* subsp. *sidoides* | | | | | | | X |
| Malvaceae | *Corchorus tridens* | | | | X | | | |

| Family | Species | Status | Site D | Site I | Site O | Site P | Site C | Connection Route |
|---|---|---|---|---|---|---|---|---|
| Malvaceae | *Gossypium australe* | | | | | | X | |
| Malvaceae | *Hibiscus austrinus* | | | | | | X | |
| Malvaceae | *Hibiscus leptocladus* | | X | | | | | |
| Malvaceae | *Melhania oblongifolia* | | X | X | X | X | X | |
| Malvaceae | *Triumfetta johnstonii* | | | | | X | | |
| Malvaceae | *Waltheria indica* | | X | X | X | X | X | |
| Meliaceae | *Azadirachta indica* | DP* | X | X | X | X | X | X |
| Menispermaceae | *Tinospora smilacina* | | X | X | | | X | |
| Montiaceae | *Calandrinia strophiolata* | | X | | | | X | |
| Moraceae | *Ficus aculeata var. indecora* | | X | | | X | X | |
| Moraceae | *Ficus tinctoria* | | X | | | | | X |
| Myrtaceae | ?Calytrix sp. (indet) | | X | X | | X | | |
| Myrtaceae | *Calytrix exstipulata* | | X | X | X | X | | X |
| Myrtaceae | *Corymbia dichromophloia* | | X | X | | X | X | |
| Myrtaceae | *Corymbia grandifolia* | | | | | | X | |
| Myrtaceae | *Corymbia greeniana* | | X | | | | X | |
| Myrtaceae | *Corymbia opaca* | | X | X | | | X | |
| Myrtaceae | *Corymbia polycarpa* | | X | X | | | | |
| Myrtaceae | *Corymbia* sp. (indet) | | X | X | X | X | | X |
| Myrtaceae | *Corymbia zygophylla* | | X | X | | X | X | |
| Myrtaceae | *Eucalyptus miniata* | | | | | | X | |
| Myrtaceae | *Eucalyptus* sp. (indet) | | X | X | | | | |
| Myrtaceae | *Melaleuca cajuputi* subsp. *cajuputi* | | X | | X | | | |
| Myrtaceae | *Melaleuca nervosa* subsp. *nervosa* | | X | X | | | | |
| Nyctaginaceae | *Boerhavia coccinea* | | | | | X | X | |
| Oleaceae | *Jasminum didymum* subsp. *lineare* | | | | | X | | |
| Oleaceae | *Jasminum molle* | | X | | | | | |

| Family | Species | Status | Site D | Site I | Site O | Site P | Site C | Connection Route |
|---|---|---|---|---|---|---|---|---|
| Phyllanthaceae | *Flueggea virosa* subsp. *melanthesoides* | | X | X | X | X | | X |
| Phyllanthaceae | *Kirganelia baccata* | | | | | | X | |
| Phyllanthaceae | *Lysiandra* ?arida | | X | X | X | X | X | |
| Phyllanthaceae | *Nellica maderaspatensis* | | | | | | | X |
| Poaceae | *Aristida hygrometrica* | | | | | | X | |
| Poaceae | *Aristida sp.* (indet) | | X | X | X | | | |
| Poaceae | *Cenchrus ciliaris* | * | | | | X | | |
| Poaceae | *Cenchrus setiger* | * | | | | | X | |
| Poaceae | *Chrysopogon fallax* | | X | X | X | X | X | |
| Poaceae | *Eriachne ciliata* | | | | | | X | |
| Poaceae | *Eriachne obtusa* | | X | | | X | X | |
| Poaceae | *Heteropogon contortus* | | | | | X | | |
| Poaceae | *Panicum laevinode* | | | | | X | | |
| Poaceae | *Panicum majusculum* | | | | | | X | |
| Poaceae | *Panicum trachyrhachis* | | | | | | X | |
| Poaceae | *Poaceae* sp. (indet) | | X | | | | | |
| Poaceae | *Triodia caelestialis* | | X | X | | X | X | X |
| Poaceae | *Urochloa trichopus* | | X | | | | | |
| Portulacaceae | *Portulaca bicolor* | | X | | | | | |
| Portulacaceae | *Portulaca* sp. (indet) | | | | X | | X | |
| Proteaceae | *Grevillea pyramidalis* subsp. *pyramidalis* | | X | X | X | X | X | X |
| Proteaceae | *Hakea arborescens* | | X | X | X | X | | |
| Proteaceae | *Hakea macrocarpa* | | X | X | | | | |
| Rubiaceae | *Spermacoce occidentalis* | | | | | X | X | |
| Santalaceae | *Santalum lanceolatum* | | X | X | | | | |
| Sapindaceae | *Atalaya hemiglauca* | | X | | | | | X |
| Sapindaceae | *Dodonaea hispidula* | | X | X | | X | X | |

| Family | Species | Status | Site D | Site I | Site O | Site P | Site C | Connection Route |
|---|---|---|---|---|---|---|---|---|
| Solanaceae | *Solanum cunninghamii* | | X | X | X | X | X | X |
| Zygophyllaceae | *Tribulopis angustifolia* | | X | X | X | | X | |

**Camballin/Looma species list**

| Family | Species | Status |
|---|---|---|
| ?Convolvulaceae | ?Convolvulaceae (indet) | |
| Malvaceae | *Abutilon otocarpum* | |
| Fabaceae | *Acacia tumida* | |
| Violaceae | *Afrohybanthus aurantiacus* | |
| Poaceae | *Aristida hygrometrica* | |
| Cleomaceae | *Arivela viscosa* | |
| Nyctaginaceae | *Boerhavia coccinea* | |
| Apocynaceae | *Calotropis gigantea* | * |
| Malvaceae | *Corchorus sidoides* subsp. *sidoides* | |
| Myrtaceae | *Corymbia zygophylla* | |
| Poaceae | *Eragrostis setifolia* | |
| Poaceae | *Eriachne ciliata* | |
| Poaceae | *Eriachne melicacea* | |
| Boraginaceae | *Euploca leptalea* | |
| Cyperaceae | *Fimbristylis* ?dichotoma | |
| Malvaceae | *Gossypium australe* | |
| Proteaceae | *Grevillea wickhamii* subsp. *aprica* | |
| Oleaceae | *Jasminum didymum* subsp. *lineare* | |
| Phyllanthaceae | *Lysiandra* ?arida | |
| Fabaceae | *Lysiphyllum cunninghamii* | |
| Malvaceae | *Melhania oblongifolia* | |

| Family | Species | Status |
|---|---|---|
| Convolvulaceae | *Polymeria* ?sp. Broome (K.F. Kenneally 9759) | P3 |
| Portulacaceae | *Portulaca* sp. (indet) | |
| Asteraceae | *Pterocaulon* sp. (indet) | |
| Amaranthaceae | *Ptilotus calostachyus* | |
| Fabaceae | *Senna costata* | |
| Menispermaceae | *Tinospora smilacina* | |
| Aizoaceae | *Trianthema pilosum* | |
| Zygophyllaceae | *Tribulopis angustifolia* | |
| Poaceae | *Triodia schinzii* | |
| Fabaceae | *Zornia chaetophora* | |
| Malvaceae | *Adansonia gregorii* | |
| Cucurbitaceae | *Cucumis variabilis* | |
| Proteaceae | *Grevillea refracta* | |
| Fabaceae | *Grona filiformis* | |
| Poaceae | *Panicum laevinode* | |
| Lamiaceae | *Premna acuminata* | |
| Fabaceae | *Senna venusta* | |
| Solanaceae | *Solanum cunninghamii* | |
| Boraginaceae | *Trichodesma zeylanicum* var. *latisepaleum* | |
| Fabaceae | *Zornia muelleriana subsp. congesta* | |
| Fabaceae | *Acacia adoxa var. subglabra* | |
| Poaceae | *Cenchrus ciliaris* | * |
| Acanthaceae | *Dicliptera armata* | |
| Goodeniaceae | *Goodenia* sp. Dampier Peninsula (B.J. Carter 675) | |
| Poaceae | *Perotis rara* | |
| ?Convolvulaceae | *?Convolvulaceae (indet)* | |

**Halls Creek species presence by site**

| Family | Species | Status | Connection Route | Site C | Subsite C3 |
|---|---|---|---|---|---|
| Aizoaceae | *Trianthema oxycalyptrum* var. *oxycalyptrum* | | | X | |
| Aizoaceae | *Trianthema triquetrum* | | | X | |
| Amaranthaceae | *Aerva javanica* | * | X | | |
| Amaranthaceae | *Gomphrena canescens* | | X | | X |
| Amaranthaceae | *Ptilotus calostachyus* | | X | X | X |
| Amaranthaceae | *Ptilotus exaltatus* | | X | X | X |
| Amaranthaceae | *Ptilotus fusiformis* | | | | X |
| Amaranthaceae | *Ptilotus spicatus* | | X | X | X |
| Asteraceae | *Minuria* sp. (indet) | | | | X |
| Bignoniaceae | *Dolichandrone occidentalis* | | X | | |
| Boraginaceae | *Ehretia saligna* | | | | X |
| Boraginaceae | *Euploca cunninghamii* | | X | X | X |
| Boraginaceae | *Euploca sp.* (indet) | | | | X |
| Boraginaceae | *Trichodesma zeylanicum* | | | | X |
| Byblidaceae | *Byblis rorida* | | | | X |
| Capparaceae | *Capparis lasiantha* | | | X | X |
| Capparaceae | *Capparis umbonata* | | | | X |
| Caryophyllaceae | *Polycarpaea holtzei* | | X | X | X |
| Caryophyllaceae | *Polycarpaea longiflora* | | | X | X |
| Celastraceae | *Stackhousia intermedia* | | X | X | X |
| Chenopodiaceae | *Maireana georgei* | | | X | |
| Chenopodiaceae | *Salsola australis* | | | X | X |
| Cleomaceae | *Arivela viscosa* | | | X | X |
| Commelinaceae | *Commelina ensifolia* | | | X | |
| Commelinaceae | *Murdannia graminea* | | | | X |
| Convolvulaceae | *Evolvulus alsinoides* var. *decumbens* | | X | | |

| Family | Species | Status | Connection Route | Site C | Subsite C3 |
|---|---|---|---|---|---|
| Convolvulaceae | *Evolvulus alsinoides* var. *villosicalyx* | | | X | X |
| Convolvulaceae | *Ipomoea nil* | * | X | X | |
| Convolvulaceae | *Ipomoea polymorpha* | | X | | X |
| Cucurbitaceae | *Cucumis melo* | | X | | X |
| Cyperaceae | *Cyperus pulchellus* | | | | X |
| Cyperaceae | *Cyperus squarrosus* | | | | X |
| Cyperaceae | *Cyperus vaginatus* | | | X | |
| Cyperaceae | *Fimbristylis dichotoma* | | | X | X |
| Cyperaceae | *Fimbristylis simulans* | | X | | X |
| Euphorbiaceae | *Euphorbia coghlanii* | | | | X |
| Euphorbiaceae | *Euphorbia schultzii* var. *schultzii* | | | X | |
| Fabaceae | *Acacia ancistrocarpa* | | X | | |
| Fabaceae | *Acacia colei* | | X | X | 6 |
| Fabaceae | *Acacia ptychophylla* | | X | | |
| Fabaceae | *Acacia retivenea* subsp. *retivenea* | | | X | |
| Fabaceae | *Acacia tenuissima* | | | X | X |
| Fabaceae | *Acacia trachycarpa* | | | | X |
| Fabaceae | *Alysicarpus muelleri* | | | | X |
| Fabaceae | *Clitoria ternatea* | * | | X | X |
| Fabaceae | *Crotalaria cunninghamii* subsp. *sturtii* | | | | X |
| Fabaceae | *Crotalaria medicaginea* var. *neglecta* | | | X | X |
| Fabaceae | *Crotalaria montana* var. *angustifolia* | | | | X |
| Fabaceae | *Cullen martinii* | | | | X |
| Fabaceae | *Indigastrum parviflorum* | | | X | X |
| Fabaceae | *Indigofera colutea* | | | X | X |
| Fabaceae | *Indigofera linifolia* | | | X | X |
| Fabaceae | *Indigofera linnaei* | | | X | X |

| Family | Species | Status | Connection Route | Site C | Subsite C3 |
|---|---|---|---|---|---|
| Fabaceae | *Indigofera monophylla* | | | | X |
| Fabaceae | *Leucaena leucocephala* subsp. *leucocephala* | * | | X | |
| Fabaceae | *Lysiphyllum cunninghamii* | | | X | |
| Fabaceae | *Neptunia scutata* | | | | X |
| Fabaceae | *Rhynchosia minima* | | | X | X |
| Fabaceae | *Senna oligoclada* | | | | X |
| Fabaceae | *Sesbania cannabina* | | | X | |
| Fabaceae | *Stylosanthes hamata* | * | X | X | X |
| Fabaceae | *Tephrosia leptoclada* | | | X | |
| Fabaceae | *Vigna lanceolata var. lanceolata* | | | | X |
| Fabaceae | *Zornia muriculata* | | | | X |
| Fabaceae | *Acacia adoxa* | | X | X | X |
| Goodeniaceae | *Goodenia odonnellii* | | X | | X |
| Goodeniaceae | *Goodenia crenata* | P3 | | | X |
| Goodeniaceae | *Goodenia scaevolina* | | X | | X |
| Goodeniaceae | *Goodenia* sp. (indet) | | X | X | |
| Lauraceae | *Cassytha filiformis* | | X | X | X |
| Loganiaceae | *Mitrasacme nudicaulis* var. *citrina* | | | X | |
| Loganiaceae | *Mitrasacme retroloba* | | | | X |
| Malvaceae | *Adansonia gregorii* | | | | X |
| Malvaceae | *Corchorus aestuans* | | | | X |
| Malvaceae | *Corchorus tridens* | | X | | X |
| Malvaceae | *Gossypium australe* | | | X | X |
| Malvaceae | *Hibiscus sturtii* | | X | | X |
| Malvaceae | *Melhania oblongifolia* | | | | X |
| Malvaceae | *Sida fibulifera* | | | | X |
| Malvaceae | *Sida* sp. Excedentifolia (J.L Egan 1925) | | X | | |

| Family | Species | Status | Connection Route | Site C | Subsite C3 |
|---|---|---|---|---|---|
| Malvaceae | *Waltheria indica* | | X | | X |
| Meliaceae | *Azadirachta indica* | DP* | | X | |
| Molluginaceae | *Trigastrotheca molluginea* | | X | X | X |
| Myrtaceae | *Corymbia ferruginea* subsp. *stypophylla* | | | X | X |
| Myrtaceae | *Eucalyptus alba* var. *australasica* | | X | X | X |
| Myrtaceae | *Eucalyptus victrix* | | | X | |
| Myrtaceae | *Melaleuca bracteata* | | | X | |
| Nyctaginaceae | *Boerhavia paludosa* | | | | X |
| Onagraceae | *Ludwigia perennis* | | | | X |
| Orobanchaceae | *Striga squamigera* | | | | X |
| Passifloraceae | *Passiflora foetida* var. *hispida* | * | | | X |
| Phyllanthaceae | *Flueggea virosa* subsp. *melanthesoides* | | X | X | |
| Phyllanthaceae | *Nellica maderaspatensis* | | | X | |
| Plantaginaceae | *Stemodia viscosa* | | X | | |
| Poaceae | *Aristida contorta* | | | X | |
| Poaceae | *Aristida holathera* var. *holathera* | | X | | X |
| Poaceae | *Aristida pruinosa* | | X | X | X |
| Poaceae | *Bothriochloa pertusa* | | | X | |
| Poaceae | *Cenchrus ciliaris* | * | | X | X |
| Poaceae | *Chrysopogon pallidus* | | | X | X |
| Poaceae | *Cymbopogon procerus* | | X | X | X |
| Poaceae | *Cynodon convergens* | | X | | |
| Poaceae | *Enneapogon polyphyllus* | | X | | X |
| Poaceae | *Enneapogon purpurascens* | | | | X |
| Poaceae | *Eragrostis tenella* | * | | X | X |
| Poaceae | *Eragrostis tenellula* | | | | X |
| Poaceae | *Eriachne ciliata* | | X | X | X |

| Family | Species | Status | Connection Route | Site C | Subsite C3 |
|---|---|---|---|---|---|
| Poaceae | *Eriachne mucronata* | | | | X |
| Poaceae | *Eulalia aurea* | | X | X | X |
| Poaceae | *Heteropogon contortus* | | | X | X |
| Poaceae | *Panicum decompositum* | | X | | X |
| Poaceae | *Paspalidium rarum* | | | | X |
| Poaceae | *Perotis rara* | | | X | |
| Poaceae | *Schizachyrium fragile* | | | X | X |
| Poaceae | *Sorghum plumosum* | | | | X |
| Poaceae | *Thaumastochloa major* | | | X | |
| Poaceae | *Themeda triandra* | | X | | X |
| Poaceae | *Triodia wiseana* | | X | X | X |
| Poaceae | *Urochloa holosericea* subsp. *velutina* | | X | | X |
| Poaceae | *Urochloa* sp. (indet) | | X | X | X |
| Poaceae | *Xerochloa barbata* | | | X | |
| Polygalaceae | *Polygala galeocephala* | | | X | X |
| Polygalaceae | *Polygala longifolia* | | | | X |
| Portulacaceae | *Portulaca oleracea* | | | X | X |
| Portulacaceae | *Portulaca* sp. (indet) | | | | X |
| Proteaceae | *Grevillea pyramidalis* subsp. *pyramidalis* | | X | | X |
| Proteaceae | *Hakea lorea* | | | X | |
| Proteaceae | *Hakea sp.* (indet) | | | | X |
| Rubiaceae | *Spermacoce* sp. Platysperma (J.R. Clarkson 6546) | | | | X |
| Scrophulariaceae | *Eremophila latrobei* subsp. *filiformis* | | | | X |
| Scrophulariaceae | *Eremophila longifolia* | | | X | |
| Stylidiaceae | *Stylidium adenophorum* | | | | X |
| Violaceae | *Afrohybanthus aurantiacus* | | | X | X |
| Violaceae | *Afrohybanthus enneaspermus* | | | | X |

| Family | Species | Status | Connection Route | Site C | Subsite C3 |
|---|---|---|---|---|---|
| Zygophyllaceae | *Tribulopis angustifolia* | | | | X |

***Flora likelihood of occurrence assessment guidelines***

| Likelihood of occurrence | Guideline |
|---|---|
| Recorded | Species recorded in current survey and/or previous recorded from desktop review |
| Likely | Species previously recorded within the study area and large areas of suitable habitat occur in the survey area. |
| Possible | Species previously recorded within the study area and areas of suitable habitat occur/may occur in the survey area. |
| Unlikely | Species previously recorded within the study area, but suitable habitat does not occur in the survey area. |
| Highly unlikely | Species not previously recorded within the study area, suitable habitat does not occur in the survey area and/or the survey area is outside the natural distribution of the species. |
| Other considerations | Intensity of survey, availability of access, growth form type, recorded flowering times, cryptic nature of species |

Source information - desktop searches
PMST – DEE Protected Matters Search Tool (PMST) to identify flora listed under the EPBC Act potentially occurring within the study area
DBCA – records of threatened flora from TPFL and WAHERB database searches within the study area
NM – DBCA *NatureMap*

***Flora Likelihood of occurrence assessment of significant flora identified in the desktop assessment as potentially occurring within the Camballin/Looma survey area***

| Family | Taxon | Status | | Description | Pre-survey likelihood of occurrence | Post-survey likelihood of occurrence | Source |
|---|---|---|---|---|---|---|---|
| | | BC Act/ DBCA | EPBC Act | | | | |
| Boraginaceae | *Euploca geocharis* | - | P1 | Erect, open shrub or herb species growing up to 40cm high. Flowers are white in colour, occurring from January to July with preference for black alluvial soils and open tussock grassland. | Unlikely.<br>Nearest specimen recorded 3 km outside survey area, however suitable habitat is unlikely to occur. | Highly Unlikely<br>Suitable habitat was not recorded within the survey area. Species would have been flowering and visible at the time of survey. | DBCA, Naturemap , TPFL, WA Herb |
| Fabaceae | *Tephrosia pedleyi* | - | P3 | Prostrate, spreading or scrambling, shrub, spindly shrub (broom-like) or herb. *Flowers have been recorded from* June to August, however likely dependent on local conditions. Grows in red sand, loamy sand or sandy laterite, on gently undulating sandplain or among dunes (Butcher 2018). In pindan country *T. pedleyi* has been collected from sites with scattered trees to open woodland (Butcher 2018). | Potential.<br>Nearest specimen recorded 19km outside survey area. Suitable habitat may be present. | Unlikely<br>Suitable habitat was not recorded within the survey area. Suitable search effort did not record the species | DBCA, Naturemap , TPFL, WA Herb |

| Family | Taxon | Status | | Description | Pre-survey likelihood of occurrence | Post-survey likelihood of occurrence | Source |
|---|---|---|---|---|---|---|---|
| | | BC Act/ DBCA | EPBC Act | | | | |
| Goodeniaceae | *Goodenia byrnesii* | - | P3 | Prostrate to decumbent herb, stems growing to 30 cm. Flowers are yellow, from January to February. A range of habitats are recorded for this species including black soil, limestone ridge, sandstone slopes, sandy loam, in sand at edge of creek, open woodland on loamy clay flats, grassland with scattered trees, drainage area in wet soil. | Potential.<br>Nearest specimen recorded 15 km outside survey area. Suitable habitat may be present. | Unlikely<br>Suitable habitat was not recorded within the survey area. Suitable search effort did not record the species | DBCA, Naturemap, TPFL, WA Herb |
| Malvaceae | *Corchorus fitzroyensis* | - | P3 | Shrub species reaching 0.5 m high and 1.2 m wide with dense grey-white stellate hairs. Flowers are yellow in colour, occurring from January to September. Grows in sandy soil or grey alluvial silt in open areas, on flat, cracking, stony ground, eroded floodplains, sand banks in river channels, along roadsides, and in moist seepage areas around billabongs (Dillon et al. 2020). Found in open savannah woodland or riverine woodland in association with Acacia sp., Corymbia bella, C. polycarpa, Eucalyptus microtheca, Sesbania sp. and Sorghum sp (Dillon et al. 2020). | Potential<br>Nearest specimen recorded 2 km outside survey area, however these records are from 1927 and 1970. Herbarium records suggest it is relatively widespread along the Fitzroy River valley, however searches in 2014 at a number of known locations failed to relocate any plants (Dillon et al. 2020). | Unlikely.<br>Suitable habitat not recorded within the survey area. Species would have been easily visible at the time of survey if present. | DBCA, Naturemap, TPFL, WA Herb |

***Flora Likelihood of occurrence assessment of significant flora identified in the desktop assessment as potentially occurring within the Derby survey area***

| Family | Taxon | Status | | Description | Pre-survey likelihood of occurrence Derby | Post-survey likelihood of occurrence Derby | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | | | |
| Fabaceae | *Rhynchosia rostrata* | - | P1 | Erect shrub species, reaching 0.5-0.6 metres high. Flowers are yellow in colour, occurring in July. Limited information available for this species, with five vouchered specimens held at WAHerb, the most recent from 1999. Previously recorded from stony ground in a tributary valley of Sandy Creek. Barnett River Gorge and on sandstone at Planigale Creek. | Unlikely<br>Nearest record 9 km from the survey area (Site C) Suitable habitat unlikely to occur within the survey area. | Highly Unlikely<br>Suitable habitat for this species not recorded within the survey area. | Naturemap, DBCA |
| Lentibulariaceae | *Utricularia byrneana* | - | P1 | A single stemmed, leafless, annual herb species with stems up to 10 cm long. Flowers are mauve in colour and have been observed in April and late July. Inhabits shallow edges of ephemerally wet swamps and lagoons (Jobson and Baleeiro 2015) | Unlikely<br>Nearest record 7 km from the survey area (Site D). Suitable habitat unlikely to occur within the survey area. | Highly Unlikely<br>Specific suitable habitat for this species not recorded within the survey area. | Naturemap, DBCA |
| Menyanthaceae | *Nymphoides beaglensis* | - | P3 | Aquatic annually occurring herb species. Flowers are white/white-pink-purple occurring from March to June. Preference for shallow freshwater environments and often found on edges of permanent waterholes or in seasonally inundated claypans & depressions. | Unlikely<br>Nearest record 7 km from the survey area (Site I). Suitable habitat unlikely to occur within the survey area. | Highly Unlikely<br>Specific suitable habitat for this species not recorded within the survey area. | Naturemap, DBCA |
| Poaceae | *Eriochloa fatmensis* | - | P3 | Upright, annually occurring grass species growing up to 30 cm tall, with habitat preference for regularly flooded woodlands (eg banks of the Fitzroy River, Harding River. | Unlikely<br>Nearest record 6 km from the survey area (Site D). Suitable habitat unlikely to occur within the survey area. | Unlikely<br>Specific suitable habitat for this species not recorded within the survey area. | Naturemap, DBCA |

***Flora Likelihood of occurrence assessment of significant flora identified in the desktop assessment as potentially occurring within the Broome survey area***

| Family | Taxon | Status | | Description | Pre-survey Likelihood of occurrence - Broome | Post-survey Likelihood of occurrence - Broome | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | | | |
| Amaranthaceae | *Gomphrena pusilla* | - | P3 | Slender branching annual, herb, to 0.2 m high. Flowers are white, from March to April or June. Found in fine, white beach sand, behind foredune, on limestone. All WA Herbarium records of this species have been recorded very near coastal (behind primary dune). | Unlikely<br>Nearest record to the survey area is 3.9 km west of the F connection. *G. pusilla* has two disjunct population centres: Port Hedland and the Dampier Peninsula coastline. Suitable habitat unlikely to occur within the survey area. | Highly Unlikely.<br>Suitable habitat for the species does not occur within the survey area. | Naturemap , DBCA, WAHerb |
| Asteraceae | *Thespidium basiflorum* | - | P1 | Densely tufted, multi-stemmed perennial, herb, to 0.2 m high. Flowers are green, occurring from May to August. Found in sandy soils and alongside creeks. | Unlikely<br>Nearest specimen recording is 3 km west of survey area (F). Records near the survey area are recorded from black soils overlain by white sand associated with Coconut Wells. Suitable habitat unlikely to occur. | Unlikely<br>Suitable habitat for the species not recorded within the survey area. | Naturemap , DBCA, WA Herb |
| Combretaceae | *Terminalia kumpaja* | - | P3 | A spreading deciduous tree reaching up to 7 metres tall and with bright green leaves and fruits. Flowers are cream-green in colour, occurring from July to November. Restricted to red pindan soils (Barrett 2015). | Likely<br>Nearest record 780 m west of area F and 600 m west of F connection. Species is known from scattered populations present on old sand dune systems on the Dampier Peninsula around Broome (Barrett 2015). Suitable habitat likely to occur within the survey area. | Recorded within the survey area at Site H and Site F. | Naturemap , DBCA |
| Convolvulaceae | *Jacquemontia* sp. Broome (A.A. Mitchell 3028) | - | P1 | Low spreading shrub species growing up to 30 cm high with light mauve coloured flowers occurring from February to April. Recorded from Pindan plain. | Likely<br>Species previously recorded from area G, and approximately 100 m west of F connection. Suitable habitat likely to occur within the survey area. | Recorded within the survey area at Site F and F connection and Site G.. | Naturemap , DBCA, WA Herb |
| Convolvulaceae | *Polymeria* sp. Broome (K.F. Kenneally 9759) | - | P3 | Prostrate, sprawling herb species with greyish leaves, reaching 30 cm in height. Flowers are mauve in colour, occurring from May to November. Occurs in Pindan and on road verges in Broome (Kenneally et al 1996). | Likely<br>Previously recorded approximately 1.2 km south of F connection. Suitable habitat likely to occur within the survey area. | Recorded within the survey area at all sites. | Naturemap , DBCA |

| Family | Taxon | Status | | Description | Pre-survey Likelihood of occurrence - Broome | Post-survey Likelihood of occurrence - Broome | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | | | |
| Fabaceae | *Acacia monticola x tumida var. kulparn* | - | P3 | Erect tree species growing up to 4 metres tall with reddish stems and grey bark. Flowers are yellow in colour. Previously recorded from a range of habitats, including coastal cliffs, coastal bushland, sand, Pindan. | Likely<br>Previously recorded 500 m south of F connection. Suitable habitat for this species is likely to occur within the survey area. | Recorded within the survey area at Site H. | DBCA, WAHerb, TPFL |
| Fabaceae | *Aphyllodium glossocarpum* | - | P3 | Spreading or erect shrub, to 1.2 m high.<br>Flowers pink/purple, April to October. Pindan sand. | Potential<br>Nearest record is approximately 2 km west of the F connection, also recorded 12 km north of Site F. Suitable habitat likely to be present within the survey area. | Unlikely<br>Suitable habitat present within the survey area, however it was not observed within the survey area, despite a suitable search effort. It is likely to have been easily observed (shrub to 1.2m) if present within the survey area. | DBCA, WAHerb, TPFL |
| Fabaceae | *Glycine pindanica* | - | P3 | Prostrate perennial, non-rhizomatous herb. Flowers pink/blue-purple, Feb to Mar or Jun. Grows on roadside in reddish brown sand in mixed pindan woodland between Broome and Beagle Bay (Kenneally et al 1996). | Likely.<br>Nearest record immediately adjacent to G-H connection on track and 1 km west of F connection. Survey area is within the known distribution of the species and suitable habitat is likely to occur. | Recorded within the survey area at Site F and F connection. | Naturemap , DBCA, WAHerb, TPFL |
| Goodeniaceae | *Goodenia byrnesii* | - | P3 | Prostrate to decumbent herb, stems growing to 30 cm. Flowers are yellow, from January to February. A range of habitats are recorded for this species including black soil, limestone ridge, sandstone slopes, sandy loam, in sand at edge of creek, open woodland on loamy clay flats, grassland with scattered trees, drainage area in wet soil. | Potential<br>Nearest record 2.6 km south west of F connection recorded from Acacia eriopoda woodland over grassland of Triodia spp. Species has a scattered distribution throughout the Kimberley, only one record from Broome, no additional records from Dampier Peninsula. Suitable habitat may occur. | Unlikely<br>Limited areas of potential habitat recorded from the survey area; these areas were considered too degraded to support this species. | Naturemap , DBCA, WAHerb |

| Family | Taxon | Status | | Description | Pre-survey Likelihood of occurrence - Broome | Post-survey Likelihood of occurrence - Broome | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | | | |
| Myrtaceae | *Corymbia paractia* | - | P1 | Tree species (often several-stemmed), 4-6(-12) m high, bark smooth, white, shedding in thin scales. Fl. white, Apr to May or Oct to Dec. Skeletal soils. In transition zone between coastal beach dunes & red pindan soils. | Likely<br>Previously recorded within the survey area (F connection) and Survey area is within the known distribution of the species. Suitable habitat may occur. | Recorded. *C. ? paractia* was tentatively recorded. Specimens collected from the vicinity of a known record of *C. paractia* were tentatively identified at *C. ? paractia* (sterile material) | Naturemap, DBCA, WA Herb |
| Stylidiaceae | *Stylidium pindanicum* | - | P3 | Tufted, perennial herb species reaching 30 cm tall with sparsely haired leaves in roseate formation. Flowers are light and dark pink in colour, occurring from February to September, with preference for sandy spoils and creek-bed habitats. | Unlikely<br>Nearest records are approximately 6.2 km north of Area F and are associated with Willie Creek. Survey area is south and west of currently known distribution of species and suitable habitat is unlikely to occur. | Unlikely<br>Suitable habitat not recorded for the species. | Naturemap, DBCA, WA Herb |

***Flora Likelihood of occurrence assessment of significant flora identified in the desktop assessment as potentially occurring within the Halls Creek survey area***

| *Family* | *Taxon* | *Status* | | Description | Pre-survey Likelihood of occurrence - Halls Creek | Post-survey Likelihood of occurrence – Halls Creek | Source |
|---|---|---|---|---|---|---|---|
| | | *EPBC Act* | *BC Act /DBCA* | | | | |
| Araliaceae | *Trachymene dusenii* | - | P3 | Erect, clump-forming perennial herb species reaching up to 1.5 metres tall. Flowers are yellow in colour occurring from November to June, with a habitat preference for red-brown clay soils and rocky ridges. | Potential<br>Nearest record is 5.8 km south west of the survey area. Survey area is within the known distribution of the species. It has a scattered distribution in the Central and Northern Kimberley and Ord Victoria Plain IBRA regions. Suitable habitat may occur within the survey area. | Unlikely<br>Suitable habitat recorded within the survey area, however the level of survey effort and likely high visibility of this species indicate that it is unlikely to occur within the survey area. | WAHerb<br>Naturemap |
| Asteraceae | *Pentalepis trichodesmoides* subsp. *incana* | - | P1 | Upright herb species reaching 1 metre tall with very hard and acute leaves. Flowers are yellow in colour, occurring from May to July, with habitat preference for sandy and loam-based soils and woodland or hillside environments. | Potential<br>Nearest record is 12.7 km east of the survey area. Survey area is within the known distribution of this species, with records scattered along the boundary of the Central Kimberley and Ord Victoria plains region to Purnululu National Park. Suitable habitat may occur. | Unlikely<br>Suitable habitat recorded within the survey area, however the level of survey effort and likely high visibility of this species indicate that it is unlikely to occur within the survey area. | Naturemap , DBCA |
| Fabaceae | *Tephrosia* sp. Kununurra (T. Handasyde TH00 250) | - | P2 | Erect shrub species with spindly, broom-like branches. Flowers (pink/purple) occur from February to July. Has been recorded from alluvial sands on floodplains, above creekline in rugged sandstone country, sandstone ridges and gorge entrances. | Unlikely<br>Nearest record is 12.8 km north east of the survey area at Mount Barrett. Centre of distribution for this species is around Kununurra, with scattered records in the north and central Kimberley. Suitable habitat unlikely to occur. | Unlikely<br>Suitable habitat for this species not recorded within the survey area. Survey area is not within the currently known distribution of this species. | WA Herb |
| Goodeniaceae | *Goodenia crenata* | - | P3 | Prostrate herb species reaching 0.1 m tall with notable rosetted leaves. Flowers are yellow in colour, occurring from May to August, with habitat preferences for red clay and loam soils and flat and sandy plains. | Likely<br>Previously recorded within the survey area (Site C) with an additional record 12 km to the south west. Suitable habitat likely to occur within the survey area. | Recorded from Subsite C3. Possible to occur in Site C and Connection corridor due to presence of habitat | Naturemap , DBCA |

| *Family* | *Taxon* | *Status* | | Description | Pre-survey Likelihood of occurrence - Halls Creek | Post-survey Likelihood of occurrence – Halls Creek | Source |
|---|---|---|---|---|---|---|---|
| | | *EPBC Act* | *BC Act /DBCA* | | | | |
| Poaceae | *Eriachne armitii* | | P1 | Spreading, annually occurring grass species, growing to 0.3 m tall. Recorded from hard setting soils, plains, lateritic soil and creek bed and banks in tussock grassland, hummock grassland, *Eucalyptus camaldulensis* open woodland. | Unlikely<br>Previously recorded approximately 8 km south east of the survey area. Species has a distribution across northern Australia, but very few records from WA. Suitable habitat for this species is unlikely to occur. | Unlikely<br>Suitable habitat for this species not recorded within the survey area. | WA Herb |
| Polygalaceae | *Polygala crassitesta* | | P1 | A large and perennially occurring herb species growing up to 0.5 m tall and very distinctive fruit with broad wings on both sides. Habitats include black soil clay plains and in association with sandstone outcropping. | Unlikely<br>Previously recorded approximately 13.5 km north east of the survey area in grassland. This occurrence is disjunct from the main extent of the species (at Kununurra). The survey area is outside the known distribution of the species and suitable habitat is unlikely to occur. | Highly Unlikely<br>No suitable habitat recorded within the survey area. | Naturemap |

Additional local tree data – Derby

| Species | Number of plants | Zone | Eastings | Northings |
|---|---|---|---|---|
| *Adansonia gregorii* | 2 | 51K | 574371.7 | 8078955.4 |
| *Adansonia gregorii* | 2 | 51K | 574357.3 | 8079252.5 |
| *Adansonia gregorii* | 1 | 51K | 574343.7 | 8079256.5 |
| *Adansonia gregorii* | 1 | 51K | 574291.2 | 8079463.9 |
| *Adansonia gregorii* | 1 | 51K | 574354.9 | 8079553.8 |
| *Adansonia gregorii* | 1 | 51K | 574325.5 | 8080189.8 |
| *Adansonia gregorii* | 1 | 51K | 574143.8 | 8079363.4 |
| *Adansonia gregorii* | 1 | 51K | 574136.4 | 8079314.8 |
| *Adansonia gregorii* | 1 | 51K | 573044.2 | 8079588.2 |
| *Adansonia gregorii* | 1 | 51K | 572905.6 | 8079624.7 |
| *Adansonia gregorii* | 1 | 51K | 573868.4 | 8080148.5 |
| *Adansonia gregorii* | 1 | 51K | 573998.0 | 8079492.9 |
| *Adansonia gregorii* | 1 | 51K | 573871.4 | 8079421.2 |
| *Adansonia gregorii* | 1 | 51K | 574022.1 | 8079251.1 |
| *Adansonia gregorii* | 1 | 51K | 574012.8 | 8079887.0 |
| *Adansonia gregorii* | 1 | 51K | 572831.4 | 8079614.8 |
| *Adansonia gregorii* | 1 | 51K | 572738.3 | 8079314.1 |
| *Adansonia gregorii* | 1 | 51K | 572629.2 | 8079188.4 |
| *Adansonia gregorii* | 1 | 51K | 573485.1 | 8080196.8 |
| *Adansonia gregorii* | 1 | 51K | 573600.6 | 8079993.4 |
| *Adansonia gregorii* | 1 | 51K | 573555.7 | 8079660.6 |
| *Adansonia gregorii* | 1 | 51K | 573570.8 | 8079380.2 |
| *Adansonia gregorii* | 1 | 51K | 573613.5 | 8078951.5 |
| *Adansonia gregorii* | 1 | 51K | 573346.3 | 8079434.4 |
| *Adansonia gregorii* | 1 | 51K | 573268.4 | 8079668.5 |
| *Adansonia gregorii* | 1 | 51K | 573261.8 | 8079710.0 |
| *Adansonia gregorii* | 1 | 51K | 573299.0 | 8079821.4 |
| *Adansonia gregorii* | 1 | 51K | 573332.2 | 8079817.2 |
| *Adansonia gregorii* | 1 | 51K | 573385.8 | 8079820.7 |
| *Adansonia gregorii* | 1 | 51K | 573393.0 | 8079839.6 |
| *Adansonia gregorii* | 1 | 51K | 573390.1 | 8080062.8 |
| *Adansonia gregorii* | 1 | 51K | 573391.0 | 8080112.7 |
| *Adansonia gregorii* | 1 | 51K | 573429.6 | 8080206.4 |
| *Adansonia gregorii* | 1 | 51K | 573492.0 | 8080228.7 |
| *Adansonia gregorii* | 1 | 51K | 573169.4 | 8079979.3 |
| *Adansonia gregorii* | 1 | 51K | 573242.8 | 8079912.4 |
| *Adansonia gregorii* | 1 | 51K | 573208.0 | 8079796.5 |
| *Adansonia gregorii* | 1 | 51K | 573187.9 | 8079733.8 |
| *Adansonia gregorii* | 1 | 51K | 573166.9 | 8079509.9 |

| Species | Number of plants | Zone | Eastings | Northings |
|---|---|---|---|---|
| *Adansonia gregorii* | 1 | 51K | 573135.6 | 8079526.4 |
| *Adansonia gregorii* | 1 | 51K | 573250.2 | 8079353.4 |
| *Adansonia gregorii* | 1 | 51K | 573253.4 | 8079346.2 |
| *Adansonia gregorii* | 1 | 51K | 573180.9 | 8079371.2 |
| *Adansonia gregorii* | 1 | 51K | 573088.6 | 8079468.9 |
| *Adansonia gregorii* | 1 | 51K | 573157.1 | 8079630.0 |
| *Adansonia gregorii* | 1 | 51K | 571699.9 | 8083252.6 |
| *Adansonia gregorii* | 1 | 51K | 571687.3 | 8083247.3 |
| *Adansonia gregorii* | 1 | 51K | 571728.5 | 8083163.9 |
| *Adansonia gregorii* | 1 | 51K | 571727.5 | 8083156.6 |
| *Adansonia gregorii* | 1 | 51K | 571740.7 | 8083077.4 |
| *Adansonia gregorii* | 1 | 51K | 571715.5 | 8083051.6 |
| *Adansonia gregorii* | 1 | 51K | 571711.0 | 8083015.8 |
| *Adansonia gregorii* | 1 | 51K | 571703.3 | 8083006.6 |
| *Adansonia gregorii* | 1 | 51K | 571698.6 | 8082982.4 |
| *Adansonia gregorii* | 1 | 51K | 571735.6 | 8082860.1 |
| *Adansonia gregorii* | 1 | 51K | 571719.6 | 8082824.0 |
| *Adansonia gregorii* | 1 | 51K | 571726.7 | 8082772.2 |
| *Adansonia gregorii* | 1 | 51K | 571737.1 | 8082754.5 |
| *Adansonia gregorii* | 1 | 51K | 571772.1 | 8082692.2 |
| *Adansonia gregorii* | 1 | 51K | 571708.6 | 8082674.1 |
| *Adansonia gregorii* | 1 | 51K | 571682.4 | 8082693.3 |
| *Adansonia gregorii* | 1 | 51K | 571636.3 | 8082733.4 |
| *Adansonia gregorii* | 1 | 51K | 571607.3 | 8082778.2 |
| *Adansonia gregorii* | 1 | 51K | 571631.2 | 8082895.3 |
| *Adansonia gregorii* | 1 | 51K | 571606.3 | 8083032.9 |
| *Adansonia gregorii* | 1 | 51K | 571608.3 | 8083039.5 |
| *Adansonia gregorii* | 1 | 51K | 571576.8 | 8083134.4 |
| *Adansonia gregorii* | 1 | 51K | 571218.8 | 8083357.7 |
| *Adansonia gregorii* | 1 | 51K | 571150.5 | 8083294.5 |
| *Adansonia gregorii* | 1 | 51K | 571154.0 | 8083259.1 |
| *Adansonia gregorii* | 1 | 51K | 571178.2 | 8083146.0 |
| *Adansonia gregorii* | 1 | 51K | 571155.7 | 8083102.0 |
| *Adansonia gregorii* | 1 | 51K | 571112.4 | 8082904.3 |
| *Adansonia gregorii* | 1 | 51K | 571108.4 | 8082900.0 |
| *Adansonia gregorii* | 1 | 51K | 571029.2 | 8082915.0 |
| *Adansonia gregorii* | 1 | 51K | 571059.5 | 8083068.9 |
| *Adansonia gregorii* | 1 | 51K | 571080.4 | 8083153.8 |
| *Adansonia gregorii* | 1 | 51K | 571079.1 | 8083167.2 |
| *Adansonia gregorii* | 1 | 51K | 571087.9 | 8083173.9 |

| Species | Number of plants | Zone | Eastings | Northings |
|---|---|---|---|---|
| *Adansonia gregorii* | 1 | 51K | 571104.4 | 8083253.0 |
| *Adansonia gregorii* | 1 | 51K | 571104.1 | 8083258.6 |
| *Adansonia gregorii* | 1 | 51K | 571093.0 | 8083342.4 |
| *Adansonia gregorii* | 1 | 51K | 571109.8 | 8083360.9 |
| *Adansonia gregorii* | 1 | 51K | 571142.0 | 8083395.2 |
| *Adansonia gregorii* | 1 | 51K | 569948.9 | 8082251.8 |
| *Adansonia gregorii* | 1 | 51K | 569915.1 | 8082285.7 |
| *Adansonia gregorii* | 1 | 51K | 569863.5 | 8082342.7 |
| *Adansonia gregorii* | 1 | 51K | 569842.4 | 8082366.5 |
| *Adansonia gregorii* | 1 | 51K | 569848.1 | 8082372.0 |
| *Adansonia gregorii* | 1 | 51K | 569747.7 | 8082473.2 |
| *Adansonia gregorii* | 1 | 51K | 569751.6 | 8082476.1 |
| *Adansonia gregorii* | 1 | 51K | 569707.0 | 8082550.3 |
| *Adansonia gregorii* | 1 | 51K | 569709.7 | 8082562.4 |
| *Adansonia gregorii* | 1 | 51K | 569717.2 | 8082588.3 |
| *Adansonia gregorii* | 1 | 51K | 569687.0 | 8082957.6 |
| *Adansonia gregorii* | 1 | 51K | 569645.5 | 8082636.5 |
| *Adansonia gregorii* | 1 | 51K | 569634.2 | 8082644.0 |
| *Adansonia gregorii* | 1 | 51K | 569640.7 | 8082652.9 |
| *Adansonia gregorii* | 1 | 51K | 571526.6 | 8083354.6 |
| *Adansonia gregorii* | 1 | 51K | 571566.4 | 8082921.9 |
| *Adansonia gregorii* | 1 | 51K | 571425.6 | 8082760.5 |
| *Adansonia gregorii* | 1 | 51K | 571498.5 | 8082861.7 |
| *Adansonia gregorii* | 1 | 51K | 571541.5 | 8083060.3 |
| *Adansonia gregorii* | 1 | 51K | 571524.7 | 8083106.7 |
| *Adansonia gregorii* | 1 | 51K | 571540.9 | 8083200.9 |
| *Adansonia gregorii* | 2 | 51K | 571296.9 | 8083455.7 |
| *Adansonia gregorii* | 1 | 51K | 571211.0 | 8083351.2 |
| *Adansonia gregorii* | 1 | 51K | 571217.6 | 8083329.9 |
| *Adansonia gregorii* | 1 | 51K | 571321.8 | 8082994.5 |
| *Adansonia gregorii* | 1 | 51K | 571287.3 | 8082833.8 |
| *Adansonia gregorii* | 1 | 51K | 571310.7 | 8082774.5 |
| *Adansonia gregorii* | 1 | 51K | 571333.0 | 8082781.5 |
| *Adansonia gregorii* | 1 | 51K | 571335.9 | 8082762.5 |
| *Adansonia gregorii* | 1 | 51K | 571306.2 | 8082768.2 |
| *Adansonia gregorii* | 1 | 51K | 571265.0 | 8082778.2 |
| *Adansonia gregorii* | 1 | 51K | 571237.7 | 8082831.0 |
| *Adansonia gregorii* | 1 | 51K | 571257.7 | 8083109.0 |
| *Adansonia gregorii* | 1 | 51K | 570154.8 | 8082648.5 |
| *Adansonia gregorii* | 1 | 51K | 570163.1 | 8082672.1 |

| Species | Number of plants | Zone | Eastings | Northings |
|---|---|---|---|---|
| *Adansonia gregorii* | 1 | 51K | 570141.8 | 8082686.8 |
| *Adansonia gregorii* | 1 | 51K | 570184.4 | 8082702.8 |
| *Adansonia gregorii* | 1 | 51K | 570174.2 | 8082731.8 |
| *Adansonia gregorii* | 1 | 51K | 571021.8 | 8082567.5 |
| *Adansonia gregorii* | 1 | 51K | 571058.7 | 8082554.7 |
| *Adansonia gregorii* | 1 | 51K | 570970.3 | 8082338.5 |
| *Adansonia gregorii* | 1 | 51K | 570972.6 | 8082351.1 |
| *Adansonia gregorii* | 1 | 51K | 570977.3 | 8082375.1 |
| *Adansonia gregorii* | 1 | 51K | 570980.8 | 8082379.1 |
| *Adansonia gregorii* | 1 | 51K | 570952.3 | 8082473.8 |
| *Adansonia gregorii* | 1 | 51K | 570868.2 | 8082552.6 |
| *Adansonia gregorii* | 1 | 51K | 570849.1 | 8082549.0 |
| *Adansonia gregorii* | 1 | 51K | 570844.2 | 8082547.3 |
| *Adansonia gregorii* | 1 | 51K | 570825.0 | 8082542.0 |
| *Adansonia gregorii* | 1 | 51K | 570833.6 | 8082507.1 |
| *Adansonia gregorii* | 1 | 51K | 570839.9 | 8082483.6 |
| *Adansonia gregorii* | 1 | 51K | 570843.2 | 8082457.0 |
| *Adansonia gregorii* | 1 | 51K | 571945.6 | 8083194.1 |
| *Adansonia gregorii* | 1 | 51K | 571936.3 | 8083133.1 |
| *Adansonia gregorii* | 2 | 51K | 571915.0 | 8083057.2 |
| *Adansonia gregorii* | 1 | 51K | 571920.8 | 8083082.0 |
| *Adansonia gregorii* | 1 | 51K | 571910.4 | 8083046.8 |
| *Adansonia gregorii* | 2 | 51K | 571913.9 | 8083015.1 |
| *Adansonia gregorii* | 2 | 51K | 571901.7 | 8082985.3 |
| *Adansonia gregorii* | 2 | 51K | 571897.3 | 8082860.6 |
| *Adansonia gregorii* | 1 | 51K | 571876.7 | 8082795.1 |
| *Adansonia gregorii* | 1 | 51K | 571771.4 | 8082793.6 |
| *Adansonia gregorii* | 2 | 51K | 571131.4 | 8083351.9 |
| *Adansonia gregorii* | 2 | 51K | 571132.9 | 8083276.0 |
| *Adansonia gregorii* | 2 | 51K | 571117.7 | 8083165.3 |
| *Adansonia gregorii* | 4 | 51K | 571440.2 | 8082171.3 |
| *Adansonia gregorii* | 2 | 51K | 571430.8 | 8082236.5 |
| *Adansonia gregorii* | 4 | 51K | 571413.1 | 8082271.1 |
| *Adansonia gregorii* | 1 | 51K | 571161.0 | 8082399.2 |
| *Adansonia gregorii* | 1 | 51K | 571229.9 | 8082473.6 |
| *Adansonia gregorii* | 1 | 51K | 571288.8 | 8082544.0 |
| *Adansonia gregorii* | 1 | 51K | 571338.9 | 8082484.8 |
| *Adansonia gregorii* | 1 | 51K | 571285.6 | 8082324.5 |
| *Adansonia gregorii* | 1 | 51K | 571274.2 | 8082300.6 |
| *Adansonia gregorii* | 1 | 51K | 571367.7 | 8081311.4 |

| Species | Number of plants | Zone | Eastings | Northings |
|---|---|---|---|---|
| *Adansonia gregorii* | 1 | 51K | 571413.1 | 8081211.3 |
| *Adansonia gregorii* | 1 | 51K | 571393.8 | 8081171.3 |
| *Adansonia gregorii* | 2 | 51K | 571344.0 | 8081087.3 |
| *Adansonia gregorii* | 1 | 51K | 570765.5 | 8083436.4 |
| *Adansonia gregorii* | 1 | 51K | 570769.3 | 8083380.7 |
| *Adansonia gregorii* | 1 | 51K | 570772.4 | 8083347.6 |
| *Adansonia gregorii* | 2 | 51K | 570881.4 | 8083329.0 |
| *Adansonia gregorii* | 1 | 51K | 570880.5 | 8083269.2 |
| *Adansonia gregorii* | 1 | 51K | 570860.8 | 8083290.4 |
| *Adansonia gregorii* | 1 | 51K | 570825.8 | 8083280.6 |
| *Adansonia gregorii* | 1 | 51K | 570835.2 | 8083163.6 |
| *Adansonia gregorii* | 1 | 51K | 570895.3 | 8083068.4 |
| *Adansonia gregorii* | 1 | 51K | 570903.5 | 8083091.4 |
| *Adansonia gregorii* | 1 | 51K | 570923.4 | 8083217.6 |
| *Adansonia gregorii* | 1 | 51K | 570979.3 | 8083303.5 |
| *Adansonia gregorii* | 1 | 51K | 570876.4 | 8082951.2 |
| *Adansonia gregorii* | 1 | 51K | 570162.6 | 8083412.1 |
| *Adansonia gregorii* | 1 | 51K | 570103.3 | 8083404.8 |
| *Adansonia gregorii* | 1 | 51K | 571292.2 | 8082249.4 |
| *Adansonia gregorii* | 1 | 51K | 571332.4 | 8082265.2 |
| *Adansonia gregorii* | 1 | 51K | 571340.2 | 8082272.8 |
| *Adansonia gregorii* | 1 | 51K | 571374.3 | 8082309.7 |
| *Adansonia gregorii* | 1 | 51K | 571388.8 | 8082326.5 |
| *Adansonia gregorii* | 1 | 51K | 571412.4 | 8082347.0 |
| *Adansonia gregorii* | 1 | 51K | 571506.3 | 8082444.7 |
| *Adansonia gregorii* | 1 | 51K | 571485.2 | 8082337.1 |
| *Adansonia gregorii* | 1 | 51K | 571397.5 | 8082286.5 |
| *Adansonia gregorii* | 1 | 51K | 571398.2 | 8082272.5 |
| *Adansonia gregorii* | 1 | 51K | 571386.4 | 8081065.4 |
| *Adansonia gregorii* | 1 | 51K | 571417.9 | 8081016.9 |
| *Adansonia gregorii* | 1 | 51K | 571513.8 | 8081029.8 |
| *Adansonia gregorii* | 1 | 51K | 571528.8 | 8081016.7 |
| *Adansonia gregorii* | 1 | 51K | 571564.1 | 8081000.6 |
| *Adansonia gregorii* | 1 | 51K | 571392.2 | 8080872.9 |
| *Adansonia gregorii* | 1 | 51K | 571384.1 | 8080880.4 |
| *Adansonia gregorii* | 1 | 51K | 571369.4 | 8080895.4 |
| *Adansonia gregorii* | 1 | 51K | 571330.0 | 8080899.4 |
| *Adansonia gregorii* | 1 | 51K | 569861.9 | 8085657.9 |
| *Adansonia gregorii* | 1 | 51K | 569867.4 | 8085694.2 |
| *Adansonia gregorii* | 1 | 51K | 569955.1 | 8085623.5 |

| Species | Number of plants | Zone | Eastings | Northings |
|---|---|---|---|---|
| *Adansonia gregorii* | 1 | 51K | 568310.9 | 8085742.5 |
| *Adansonia gregorii* | 1 | 51K | 568276.9 | 8085717.9 |
| *Adansonia gregorii* | 1 | 51K | 568293.1 | 8085657.3 |
| *Adansonia gregorii* | 1 | 51K | 568283.0 | 8085555.8 |
| *Adansonia gregorii* | 1 | 51K | 568464.6 | 8085537.3 |
| *Adansonia gregorii* | 1 | 51K | 568374.2 | 8085534.0 |
| *Adansonia gregorii* | 1 | 51K | 568349.4 | 8085580.0 |
| *Adansonia gregorii* | 1 | 51K | 570702.3 | 8083357.5 |
| *Adansonia gregorii* | 1 | 51K | 570712.1 | 8083340.5 |
| *Adansonia gregorii* | 1 | 51K | 570723.3 | 8083332.3 |
| *Adansonia gregorii* | 1 | 51K | 570708.6 | 8083283.1 |
| *Adansonia gregorii* | 1 | 51K | 570713.7 | 8083274.7 |
| *Adansonia gregorii* | 1 | 51K | 570708.0 | 8083242.7 |
| *Adansonia gregorii* | 1 | 51K | 570680.3 | 8083133.3 |
| *Adansonia gregorii* | 1 | 51K | 570680.7 | 8083015.2 |
| *Adansonia gregorii* | 1 | 51K | 570679.7 | 8083011.5 |
| *Adansonia gregorii* | 1 | 51K | 570696.8 | 8082975.9 |
| *Adansonia gregorii* | 1 | 51K | 570655.3 | 8082975.2 |
| *Adansonia gregorii* | 1 | 51K | 570625.1 | 8082971.9 |
| *Adansonia gregorii* | 1 | 51K | 570605.0 | 8082991.0 |
| *Adansonia gregorii* | 1 | 51K | 570600.0 | 8083058.5 |
| *Adansonia gregorii* | 1 | 51K | 570590.0 | 8083132.7 |
| *Adansonia gregorii* | 1 | 51K | 570614.1 | 8083267.2 |
| *Adansonia gregorii* | 1 | 51K | 570630.9 | 8083351.4 |
| *Adansonia gregorii* | 1 | 51K | 570643.9 | 8083347.2 |
| *Adansonia gregorii* | 1 | 51K | 570622.0 | 8083353.0 |
| *Adansonia gregorii* | 1 | 51K | 570630.0 | 8083361.0 |
| *Adansonia gregorii* | 1 | 51K | 570638.6 | 8083363.1 |
| *Adansonia gregorii* | 1 | 51K | 570653.2 | 8083361.9 |
| *Adansonia gregorii* | 1 | 51K | 570141.2 | 8085503.3 |
| *Adansonia gregorii* | 1 | 51K | 570442.7 | 8085366.7 |
| *Adansonia gregorii* | 1 | 51K | 570419.4 | 8085360.3 |
| *Adansonia gregorii* | 1 | 51K | 570413.1 | 8085362.7 |
| *Adansonia gregorii* | 1 | 51K | 570403.8 | 8085359.6 |
| *Adansonia gregorii* | 1 | 51K | 570369.5 | 8085346.2 |
| *Adansonia gregorii* | 1 | 51K | 570359.2 | 8085378.2 |
| *Adansonia gregorii* | 1 | 51K | 570310.0 | 8085354.9 |
| *Adansonia gregorii* | 1 | 51K | 570278.9 | 8085371.8 |
| *Adansonia gregorii* | 1 | 51K | 570254.7 | 8085382.2 |
| *Adansonia gregorii* | 1 | 51K | 570210.6 | 8085395.6 |

| Species | Number of plants | Zone | Eastings | Northings |
|---|---|---|---|---|
| *Adansonia gregorii* | 1 | 51K | 570169.8 | 8085397.7 |
| *Adansonia gregorii* | 1 | 51K | 570260.7 | 8085313.6 |
| *Adansonia gregorii* | 1 | 51K | 570269.1 | 8085311.5 |
| *Adansonia gregorii* | 1 | 51K | 570310.3 | 8085310.5 |
| *Adansonia gregorii* | 1 | 51K | 570371.4 | 8085308.6 |
| *Adansonia gregorii* | 1 | 51K | 570377.2 | 8085310.8 |
| *Adansonia gregorii* | 1 | 51K | 570446.0 | 8085312.1 |
| *Adansonia gregorii* | 1 | 51K | 570461.0 | 8085305.8 |
| *Adansonia gregorii* | 1 | 51K | 570481.4 | 8085292.5 |
| *Adansonia gregorii* | 1 | 51K | 570481.6 | 8085264.3 |
| *Adansonia gregorii* | 1 | 51K | 570480.7 | 8085246.2 |
| *Adansonia gregorii* | 1 | 51K | 570444.9 | 8085233.3 |
| *Adansonia gregorii* | 1 | 51K | 570410.3 | 8085235.1 |
| *Adansonia gregorii* | 1 | 51K | 570383.2 | 8085244.8 |
| *Adansonia gregorii* | 1 | 51K | 570317.2 | 8085225.4 |
| *Adansonia gregorii* | 1 | 51K | 570292.1 | 8085231.6 |
| *Adansonia gregorii* | 1 | 51K | 570247.0 | 8085231.5 |
| *Adansonia gregorii* | 1 | 51K | 570184.3 | 8085230.3 |
| *Adansonia gregorii* | 1 | 51K | 570135.9 | 8085228.3 |
| *Adansonia gregorii* | 1 | 51K | 570076.4 | 8085227.6 |
| *Adansonia gregorii* | 1 | 51K | 570027.7 | 8085219.8 |
| *Adansonia gregorii* | 1 | 51K | 569977.3 | 8085223.5 |
| *Adansonia gregorii* | 1 | 51K | 569861.6 | 8085331.4 |
| *Adansonia gregorii* | 1 | 51K | 569886.9 | 8085722.6 |
| *Adansonia gregorii* | 1 | 51K | 570287.6 | 8083221.2 |
| *Adansonia gregorii* | 1 | 51K | 570230.5 | 8083142.9 |
| *Adansonia gregorii* | 1 | 51K | 570218.3 | 8083124.5 |
| *Adansonia gregorii* | 1 | 51K | 570087.9 | 8083102.9 |
| *Adansonia gregorii* | 1 | 51K | 570066.8 | 8083071.6 |
| *Adansonia gregorii* | 1 | 51K | 570009.4 | 8083075.2 |
| *Adansonia gregorii* | 1 | 51K | 569966.4 | 8083084.3 |
| *Adansonia gregorii* | 1 | 51K | 569917.2 | 8083050.8 |
| *Adansonia gregorii* | 1 | 51K | 569893.7 | 8083059.2 |
| *Adansonia gregorii* | 1 | 51K | 569873.2 | 8083056.5 |
| *Adansonia gregorii* | 1 | 51K | 569850.3 | 8083050.3 |
| *Adansonia gregorii* | 1 | 51K | 569817.0 | 8083059.4 |
| *Adansonia gregorii* | 1 | 51K | 569765.6 | 8083042.7 |
| *Adansonia gregorii* | 1 | 51K | 569715.3 | 8083134.9 |
| *Adansonia gregorii* | 1 | 51K | 569748.9 | 8083160.5 |
| *Adansonia gregorii* | 1 | 51K | 569760.7 | 8083174.8 |

| Species | Number of plants | Zone | Eastings | Northings |
|---|---|---|---|---|
| *Adansonia gregorii* | 1 | 51K | 569799.0 | 8083138.5 |
| *Adansonia gregorii* | 1 | 51K | 569836.3 | 8083127.3 |
| *Adansonia gregorii* | 1 | 51K | 569879.8 | 8083128.5 |
| *Adansonia gregorii* | 1 | 51K | 569894.3 | 8083130.7 |
| *Adansonia gregorii* | 1 | 51K | 569902.2 | 8083151.8 |
| *Adansonia gregorii* | 1 | 51K | 569912.5 | 8083174.9 |
| *Adansonia gregorii* | 1 | 51K | 569969.4 | 8083180.5 |
| *Adansonia gregorii* | 1 | 51K | 570100.0 | 8083166.8 |
| *Adansonia gregorii* | 1 | 51K | 570109.6 | 8083188.4 |
| *Adansonia gregorii* | 1 | 51K | 570220.3 | 8083176.9 |
| *Adansonia gregorii* | 1 | 51K | 570244.3 | 8083190.5 |
| *Adansonia gregorii* | 1 | 51K | 570118.9 | 8085495.6 |
| *Adansonia gregorii* | 1 | 51K | 570111.6 | 8085432.9 |
| *Adansonia gregorii* | 1 | 51K | 570102.3 | 8085405.3 |
| *Adansonia gregorii* | 2 | 51K | 570135.9 | 8085322.0 |
| *Adansonia gregorii* | 1 | 51K | 570108.2 | 8085317.1 |
| *Adansonia gregorii* | 1 | 51K | 570025.5 | 8085433.1 |
| *Adansonia gregorii* | 1 | 51K | 569935.2 | 8085456.9 |
| *Adansonia gregorii* | 1 | 51K | 570084.0 | 8083297.4 |
| *Adansonia gregorii* | 1 | 51K | 570055.5 | 8083300.9 |
| *Adansonia gregorii* | 1 | 51K | 569721.5 | 8083141.7 |
| *Adansonia gregorii* | 1 | 51K | 569726.9 | 8083141.8 |
| *Adansonia gregorii* | 1 | 51K | 569807.3 | 8083171.0 |
| *Adansonia gregorii* | 2 | 51K | 569964.3 | 8083214.4 |
| *Adansonia gregorii* | 1 | 51K | 570111.7 | 8083240.8 |
| *Adansonia gregorii* | 1 | 51K | 570080.4 | 8083266.9 |
| *Adansonia gregorii* | 1 | 51K | 569999.0 | 8083264.0 |
| *Adansonia gregorii* | 1 | 51K | 572045.7 | 8079611.7 |
| *Adansonia gregorii* | 1 | 51K | 572323.5 | 8079428.2 |
| *Adansonia gregorii* | 1 | 51K | 573292.1 | 8080115.6 |
| *Adansonia gregorii* | 1 | 51K | 573743.4 | 8079362.1 |
| *Adansonia gregorii* | 1 | 51K | 569430.8 | 8083183.8 |
| *Adansonia gregorii* | 1 | 51K | 569382.4 | 8083133.6 |
| *Adansonia gregorii* | 1 | 51K | 569399.2 | 8083109.1 |
| *Adansonia gregorii* | 1 | 51K | 569310.9 | 8083133.5 |
| *Adansonia gregorii* | 1 | 51K | 569352.1 | 8083269.5 |
| *Adansonia gregorii* | 1 | 51K | 569351.4 | 8083487.6 |
| *Adansonia gregorii* | 1 | 51K | 572058.9 | 8079153.2 |
| *Adansonia gregorii* | 1 | 51K | 570928.2 | 8082869.8 |
| *Adansonia gregorii* | 1 | 51K | 570765.2 | 8082960.7 |

| Species | Number of plants | Zone | Eastings | Northings |
|---|---|---|---|---|
| *Adansonia gregorii* | 1 | 51K | 570553.6 | 8082946.5 |
| *Adansonia gregorii* | 2 | 51K | 570531.4 | 8082740.7 |
| *Adansonia gregorii* | 1 | 51K | 570540.9 | 8082723.1 |
| *Adansonia gregorii* | 1 | 51K | 570505.4 | 8082269.3 |
| *Adansonia gregorii* | 1 | 51K | 570413.4 | 8082265.3 |
| *Adansonia gregorii* | 1 | 51K | 572932.9 | 8078914.2 |
| *Adansonia gregorii* | 1 | 51K | 572821.1 | 8079373.8 |
| *Adansonia gregorii* | 1 | 51K | 572933.2 | 8079359.9 |
| *Adansonia gregorii* | 1 | 51K | 572791.2 | 8079535.7 |
| *Adansonia gregorii* | 1 | 51K | 572954.5 | 8079789.1 |
| *Adansonia gregorii* | 1 | 51K | 574326.7 | 8078923.9 |
| *Adansonia gregorii* | 1 | 51K | 569480.2 | 8083465.1 |
| *Adansonia gregorii* | 1 | 51K | 569472.8 | 8083417.9 |
| *Adansonia gregorii* | 1 | 51K | 569536.1 | 8083415.7 |
| *Adansonia gregorii* | 1 | 51K | 569543.6 | 8083397.8 |
| *Adansonia gregorii* | 1 | 51K | 569542.5 | 8083389.7 |
| *Adansonia gregorii* | 1 | 51K | 569576.5 | 8083339.4 |
| *Adansonia gregorii* | 1 | 51K | 569594.7 | 8083337.5 |
| *Adansonia gregorii* | 1 | 51K | 569618.6 | 8083330.8 |
| *Adansonia gregorii* | 1 | 51K | 569604.0 | 8083252.7 |
| *Adansonia gregorii* | 1 | 51K | 569613.6 | 8083239.9 |
| *Adansonia gregorii* | 1 | 51K | 569617.7 | 8083222.3 |
| *Adansonia gregorii* | 1 | 51K | 569664.4 | 8083185.9 |
| *Adansonia gregorii* | 1 | 51K | 569661.0 | 8083168.9 |
| *Adansonia gregorii* | 1 | 51K | 569668.0 | 8083157.9 |
| *Adansonia gregorii* | 1 | 51K | 569667.0 | 8083156.8 |
| *Adansonia gregorii* | 1 | 51K | 569663.8 | 8083145.3 |
| *Adansonia gregorii* | 1 | 51K | 569611.3 | 8083092.9 |
| *Adansonia gregorii* | 1 | 51K | 569600.7 | 8083093.1 |
| *Adansonia gregorii* | 1 | 51K | 569586.2 | 8083093.6 |
| *Adansonia gregorii* | 1 | 51K | 569558.9 | 8083099.8 |
| *Adansonia gregorii* | 1 | 51K | 569523.1 | 8083106.2 |
| *Adansonia gregorii* | 1 | 51K | 569503.1 | 8083104.6 |
| *Adansonia gregorii* | 1 | 51K | 569491.5 | 8083107.2 |
| *Adansonia gregorii* | 1 | 51K | 569528.9 | 8083170.5 |
| *Adansonia gregorii* | 1 | 51K | 569547.9 | 8083176.3 |
| *Adansonia gregorii* | 1 | 51K | 569538.7 | 8083198.6 |
| *Adansonia gregorii* | 1 | 51K | 569529.0 | 8083234.0 |
| *Adansonia gregorii* | 1 | 51K | 569510.9 | 8083230.2 |
| *Adansonia gregorii* | 1 | 51K | 569430.5 | 8083320.3 |

| Species | Number of plants | Zone | Eastings | Northings |
|---|---|---|---|---|
| *Adansonia gregorii* | 1 | 51K | 569431.8 | 8083330.2 |
| *Adansonia gregorii* | 1 | 51K | 569450.3 | 8083331.2 |
| *Adansonia gregorii* | 1 | 51K | 569465.4 | 8083353.7 |
| *Adansonia gregorii* | 1 | 51K | 569462.8 | 8083358.5 |
| *Adansonia gregorii* | 1 | 51K | 569460.5 | 8083382.9 |
| *Adansonia gregorii* | 1 | 51K | 569478.7 | 8083386.6 |
| *Adansonia gregorii* | 1 | 51K | 569470.7 | 8083424.1 |
| *Adansonia gregorii* | 1 | 51K | 573293.1 | 8080112.1 |
| *Adansonia gregorii* | 1 | 51K | 572165.7 | 8078989.7 |
| *Adansonia gregorii* | 1 | 51K | 572081.8 | 8079107.4 |
| *Adansonia gregorii* | 1 | 51K | 570833.2 | 8082412.7 |
| *Adansonia gregorii* | 1 | 51K | 570807.1 | 8082431.1 |
| *Adansonia gregorii* | 1 | 51K | 570764.3 | 8082433.9 |
| *Adansonia gregorii* | 1 | 51K | 570777.3 | 8082479.1 |
| *Adansonia gregorii* | 1 | 51K | 570799.8 | 8082493.8 |
| *Adansonia gregorii* | 1 | 51K | 570782.8 | 8082501.6 |
| *Adansonia gregorii* | 1 | 51K | 570775.5 | 8082539.5 |
| *Adansonia gregorii* | 1 | 51K | 570770.8 | 8082571.8 |
| *Adansonia gregorii* | 1 | 51K | 570764.7 | 8082570.7 |
| *Adansonia gregorii* | 1 | 51K | 570717.1 | 8082601.7 |
| *Adansonia gregorii* | 1 | 51K | 570665.5 | 8082606.6 |
| *Adansonia gregorii* | 1 | 51K | 570669.4 | 8082579.4 |
| *Adansonia gregorii* | 1 | 51K | 570614.5 | 8082589.4 |
| *Adansonia gregorii* | 1 | 51K | 570608.3 | 8082601.5 |
| *Adansonia gregorii* | 1 | 51K | 570485.8 | 8082612.7 |
| *Adansonia gregorii* | 1 | 51K | 570398.3 | 8082610.6 |
| *Adansonia gregorii* | 1 | 51K | 570376.2 | 8082646.2 |
| *Adansonia gregorii* | 1 | 51K | 570340.3 | 8082626.7 |
| *Adansonia gregorii* | 1 | 51K | 570464.5 | 8082687.5 |
| *Adansonia gregorii* | 1 | 51K | 570550.5 | 8082729.2 |
| *Adansonia gregorii* | 1 | 51K | 570558.7 | 8082738.2 |
| *Adansonia gregorii* | 1 | 51K | 570668.6 | 8082692.7 |
| *Adansonia gregorii* | 1 | 51K | 570686.2 | 8082673.1 |
| *Adansonia gregorii* | 1 | 51K | 570662.7 | 8082602.1 |
| *Adansonia gregorii* | 1 | 51K | 570717.8 | 8082559.4 |
| *Adansonia gregorii* | 1 | 51K | 570677.0 | 8082698.2 |
| *Adansonia gregorii* | 1 | 51K | 570650.9 | 8082733.5 |
| *Adansonia gregorii* | 1 | 51K | 570621.3 | 8082725.6 |
| *Adansonia gregorii* | 1 | 51K | 570597.4 | 8082768.0 |
| *Adansonia gregorii* | 1 | 51K | 570620.6 | 8082802.0 |

| Species | Number of plants | Zone | Eastings | Northings |
|---|---|---|---|---|
| *Adansonia gregorii* | 1 | 51K | 570587.2 | 8082814.7 |
| *Adansonia gregorii* | 1 | 51K | 570563.9 | 8082803.1 |
| *Adansonia gregorii* | 1 | 51K | 571081.1 | 8081466.2 |
| *Adansonia gregorii* | 1 | 51K | 571043.8 | 8081439.0 |
| *Adansonia gregorii* | 1 | 51K | 570985.1 | 8081448.5 |
| *Adansonia gregorii* | 1 | 51K | 570939.4 | 8081400.8 |
| *Adansonia gregorii* | 1 | 51K | 568305.6 | 8085693.5 |
| *Adansonia gregorii* | 1 | 51K | 568316.7 | 8085671.2 |
| *Adansonia gregorii* | 1 | 51K | 568336.4 | 8085650.2 |
| *Adansonia gregorii* | 1 | 51K | 568324.3 | 8085639.2 |
| *Adansonia gregorii* | 1 | 51K | 568329.5 | 8085626.6 |
| *Adansonia gregorii* | 1 | 51K | 568324.6 | 8085591.5 |
| *Adansonia gregorii* | 1 | 51K | 568303.8 | 8085570.4 |
| *Adansonia gregorii* | 1 | 51K | 568276.5 | 8085587.3 |
| *Adansonia gregorii* | 1 | 51K | 568497.4 | 8085761.1 |
| *Adansonia gregorii* | 1 | 51K | 568643.3 | 8085770.4 |
| *Adansonia gregorii* | 1 | 51K | 568678.5 | 8085768.7 |
| *Adansonia gregorii* | 1 | 51K | 568780.5 | 8085745.7 |
| *Adansonia gregorii* | 1 | 51K | 571191.1 | 8081402.7 |
| *Adansonia gregorii* | 1 | 51K | 571204.8 | 8081401.7 |
| *Adansonia gregorii* | 1 | 51K | 571213.9 | 8081403.5 |
| *Adansonia gregorii* | 1 | 51K | 571232.4 | 8081459.1 |
| *Adansonia gregorii* | 1 | 51K | 571260.3 | 8081464.4 |
| *Adansonia gregorii* | 1 | 51K | 571339.8 | 8081467.9 |
| *Adansonia gregorii* | 1 | 51K | 571352.0 | 8081460.0 |
| *Adansonia gregorii* | 1 | 51K | 571444.2 | 8081429.9 |
| *Adansonia gregorii* | 1 | 51K | 571503.7 | 8081440.4 |
| *Adansonia gregorii* | 1 | 51K | 571511.3 | 8081447.9 |
| *Adansonia gregorii* | 1 | 51K | 571515.3 | 8081448.0 |
| *Adansonia gregorii* | 1 | 51K | 571518.5 | 8081437.8 |
| *Adansonia gregorii* | 1 | 51K | 571541.4 | 8081428.5 |
| *Adansonia gregorii* | 1 | 51K | 571564.8 | 8081378.5 |
| *Adansonia gregorii* | 1 | 51K | 571473.6 | 8081344.5 |
| *Adansonia gregorii* | 1 | 51K | 571451.2 | 8081350.0 |
| *Adansonia gregorii* | 1 | 51K | 571379.4 | 8081338.3 |
| *Adansonia gregorii* | 1 | 51K | 571297.3 | 8081373.5 |
| *Adansonia gregorii* | 1 | 51K | 571240.1 | 8081355.1 |
| *Adansonia gregorii* | 1 | 51K | 622880.6 | 8006291.4 |
| *Adansonia gregorii* | 1 | 51K | 622966.6 | 8006270.6 |
| *Adansonia gregorii* | 1 | 51K | 570448.3 | 8082962.5 |

| Species | Number of plants | Zone | Eastings | Northings |
|---|---|---|---|---|
| *Adansonia gregorii* | 1 | 51K | 572030.7 | 8079226.7 |
| *Adansonia gregorii* | 1 | 51K | 571993.4 | 8079273.3 |
| *Adansonia gregorii* | 1 | 51K | 571367.2 | 8080200.4 |
| *Adansonia gregorii* | 1 | 51K | 571233.6 | 8080445.8 |
| *Adansonia gregorii* | 1 | 51K | 571169.0 | 8080554.9 |
| *Adansonia gregorii* | 1 | 51K | 571193.5 | 8080574.5 |
| *Adansonia gregorii* | 1 | 51K | 571173.9 | 8080613.7 |
| *Adansonia gregorii* | 1 | 51K | 571176.8 | 8080606.4 |
| *Adansonia gregorii* | 1 | 51K | 571169.8 | 8080618.0 |
| *Adansonia gregorii* | 1 | 51K | 571069.4 | 8080745.6 |
| *Adansonia gregorii* | 1 | 51K | 570990.2 | 8080896.2 |
| *Adansonia gregorii* | 1 | 51K | 571017.0 | 8080891.4 |
| *Adansonia gregorii* | 1 | 51K | 571012.0 | 8080900.0 |
| *Adansonia gregorii* | 1 | 51K | 570974.2 | 8080990.1 |
| *Adansonia gregorii* | 1 | 51K | 570913.8 | 8081100.2 |
| *Adansonia gregorii* | 1 | 51K | 570908.5 | 8081115.3 |
| *Adansonia gregorii* | 1 | 51K | 570901.3 | 8081147.7 |
| *Adansonia gregorii* | 1 | 51K | 570891.3 | 8081185.6 |
| *Adansonia gregorii* | 1 | 51K | 570880.2 | 8081210.4 |
| *Adansonia gregorii* | 1 | 51K | 570869.3 | 8081266.9 |
| *Adansonia gregorii* | 1 | 51K | 570845.0 | 8081345.3 |
| *Adansonia gregorii* | 1 | 51K | 570847.7 | 8081424.8 |
| *Adansonia gregorii* | 1 | 51K | 570719.5 | 8081784.2 |
| *Adansonia gregorii* | 1 | 51K | 570738.5 | 8081822.8 |
| *Adansonia gregorii* | 1 | 51K | 570689.3 | 8082011.3 |
| *Adansonia gregorii* | 1 | 51K | 570687.9 | 8082020.9 |
| *Adansonia gregorii* | 1 | 51K | 570649.2 | 8082151.5 |
| *Adansonia gregorii* | 1 | 51K | 570649.4 | 8082160.8 |
| *Adansonia gregorii* | 1 | 51K | 570688.9 | 8082293.6 |
| *Adansonia gregorii* | 1 | 51K | 570707.1 | 8082295.8 |
| *Adansonia gregorii* | 1 | 51K | 570620.9 | 8082323.1 |
| *Adansonia gregorii* | 1 | 51K | 570613.2 | 8082331.4 |
| *Adansonia gregorii* | 1 | 51K | 570531.0 | 8082685.7 |
| *Adansonia gregorii* | 1 | 51K | 570487.6 | 8082841.9 |
| *Adansonia gregorii* | 1 | 51K | 570335.3 | 8083150.1 |
| *Adansonia gregorii* | 1 | 51K | 569940.2 | 8083947.9 |
| *Adansonia gregorii* | 1 | 51K | 569681.3 | 8084476.8 |
| *Adansonia gregorii* | 1 | 51K | 569578.7 | 8084682.6 |
| *Adansonia gregorii* | 1 | 51K | 569583.7 | 8084669.9 |
| *Adansonia gregorii* | 1 | 51K | 569412.5 | 8085021.1 |

| Species | Number of plants | Zone | Eastings | Northings |
|---|---|---|---|---|
| *Adansonia gregorii* | 1 | 51K | 569301.9 | 8085250.0 |
| *Adansonia gregorii* | 1 | 51K | 569900.9 | 8082721.7 |
| *Adansonia gregorii* | 1 | 51K | 569944.7 | 8082827.8 |
| *Adansonia gregorii* | 1 | 51K | 570026.0 | 8082813.9 |
| *Adansonia gregorii* | 2 | 51K | 570064.4 | 8082787.8 |
| *Adansonia gregorii* | 1 | 51K | 570175.5 | 8082735.3 |
| *Adansonia gregorii* | 1 | 51K | 570305.9 | 8082718.0 |
| *Adansonia gregorii* | 1 | 51K | 570351.5 | 8082766.6 |
| *Adansonia gregorii* | 1 | 51K | 570445.2 | 8082546.3 |
| *Adansonia gregorii* | 1 | 51K | 570469.1 | 8082531.8 |
| *Adansonia gregorii* | 1 | 51K | 570446.8 | 8082478.8 |
| *Adansonia gregorii* | 1 | 51K | 570253.5 | 8083334.1 |
| *Adansonia gregorii* | 1 | 51K | 570159.4 | 8083508.5 |
| *Adansonia gregorii* | 1 | 51K | 570108.6 | 8083628.5 |
| *Adansonia gregorii* | 1 | 51K | 570048.5 | 8083737.3 |
| *Adansonia gregorii* | 1 | 51K | 569942.6 | 8083948.7 |
| *Adansonia gregorii* | 1 | 51K | 569620.6 | 8084596.5 |
| *Adansonia gregorii* | 1 | 51K | 569520.3 | 8084790.3 |
| *Adansonia gregorii* | 1 | 51K | 569378.0 | 8085091.7 |
| *Adansonia gregorii* | 1 | 51K | 569238.0 | 8085374.2 |
| *Adansonia gregorii* | 1 | 51K | 569156.8 | 8085598.5 |
| *Adansonia gregorii* | 1 | 51K | 569076.5 | 8085766.7 |
| *Adansonia gregorii* | 1 | 51K | 569295.3 | 8085747.3 |
| *Adansonia gregorii* | 1 | 51K | 573919.6 | 8080264.7 |
| *Adansonia gregorii* | 1 | 51K | 573908.5 | 8079648.1 |
| *Adansonia gregorii* | 1 | 51K | 573938.5 | 8079585.9 |
| *Adansonia gregorii* | 1 | 51K | 573927.6 | 8078965.2 |
| *Adansonia gregorii* | 1 | 51K | 574007.8 | 8079316.4 |
| *Adansonia gregorii* | 1 | 51K | 574017.0 | 8079903.8 |
| *Adansonia gregorii* | 1 | 51K | 572738.0 | 8079359.8 |
| *Adansonia gregorii* | 1 | 51K | 572784.9 | 8079120.4 |
| *Adansonia gregorii* | 1 | 51K | 571527.2 | 8083354.3 |
| *Adansonia gregorii* | 1 | 51K | 571442.7 | 8083174.1 |
| *Adansonia gregorii* | 1 | 51K | 571428.5 | 8082727.9 |
| *Adansonia gregorii* | 1 | 51K | 571253.0 | 8083195.9 |
| *Adansonia gregorii* | 1 | 51K | 571174.0 | 8082374.8 |
| *Adansonia gregorii* | 1 | 51K | 571199.0 | 8082397.5 |
| *Adansonia gregorii* | 3 | 51K | 571290.3 | 8082563.7 |
| *Adansonia gregorii* | 1 | 51K | 571370.3 | 8081325.0 |
| *Adansonia gregorii* | 1 | 51K | 571384.1 | 8081249.4 |

| Species | Number of plants | Zone | Eastings | Northings |
|---|---|---|---|---|
| *Adansonia gregorii* | 1 | 51K | 571406.5 | 8081113.6 |
| *Adansonia gregorii* | 1 | 51K | 570918.9 | 8083302.4 |
| *Adansonia gregorii* | 2 | 51K | 570979.9 | 8083303.2 |
| *Adansonia gregorii* | 1 | 51K | 570139.7 | 8085356.8 |
| *Adansonia gregorii* | 1 | 51K | 570001.6 | 8085320.9 |
| *Adansonia gregorii* | 1 | 51K | 570006.6 | 8085459.0 |
| *Adansonia gregorii* | 1 | 51K | 572280.2 | 8079470.4 |
| *Adansonia gregorii* | 1 | 51K | 573731.3 | 8079910.5 |
| *Adansonia gregorii* | 1 | 51K | 573757.9 | 8079825.2 |
| *Adansonia gregorii* | 1 | 51K | 573672.0 | 8079150.0 |
| *Adansonia gregorii* | 1 | 51K | 571118.5 | 8082388.0 |
| *Adansonia gregorii* | 1 | 51K | 570994.5 | 8082834.7 |
| *Adansonia gregorii* | 1 | 51K | 570822.9 | 8082939.5 |
| *Adansonia gregorii* | 1 | 51K | 570630.1 | 8082937.4 |
| *Adansonia gregorii* | 1 | 51K | 570535.4 | 8082936.2 |
| *Adansonia gregorii* | 1 | 51K | 570566.4 | 8082691.1 |
| *Adansonia gregorii* | 1 | 51K | 570465.2 | 8082204.0 |
| *Adansonia gregorii* | 2 | 51K | 570436.7 | 8082263.5 |
| *Adansonia gregorii* | 1 | 51K | 570121.9 | 8082480.4 |
| *Adansonia gregorii* | 1 | 51K | 570231.9 | 8085519.5 |
| *Adansonia gregorii* | 1 | 51K | 571055.7 | 8081466.6 |
| *Adansonia gregorii* | 1 | 51K | 571035.9 | 8081447.5 |
| *Adansonia gregorii* | 1 | 51K | 570869.4 | 8081434.2 |
| *Adansonia gregorii* | 1 | 51K | 571280.3 | 8081345.4 |
| *Adansonia gregorii* | 1 | 51K | 622939.3 | 8006233.4 |
| *Adansonia gregorii* | 1 | 51K | 570058.9 | 8082583.3 |
| *Adansonia gregorii* | 1 | 51K | 569862.4 | 8082755.5 |
| *Adansonia gregorii* | 1 | 51K | 570025.7 | 8082813.6 |
| *Adansonia gregorii* | 1 | 51K | 570132.6 | 8082778.3 |
| *Adansonia gregorii* | 1 | 51K | 570565.8 | 8082428.5 |
| *Adansonia gregorii* | 1 | 51K | 569700.1 | 8084442.3 |
| *Adansonia gregorii* | 1 | 51K | 569539.5 | 8084753.1 |
| *Adansonia gregorii* | 1 | 51K | 569429.3 | 8084983.1 |
| *Adansonia gregorii* | 1 | 51K | 569315.3 | 8085222.3 |
| *Adansonia gregorii* | 1 | 51K | 569200.7 | 8085462.1 |
| *Adansonia gregorii* | 1 | 51K | 569058.7 | 8085725.6 |
| *Adansonia gregorii* | 1 | 51K | 569264.1 | 8085772.0 |
| *Bauhinia cunninghamii* | 1 | 51K | 574368.7 | 8079175.0 |
| *Bauhinia cunninghamii* | 2 | 51K | 574144.6 | 8079309.6 |
| *Bauhinia cunninghamii* | 3 | 51K | 572929.1 | 8079725.1 |

| Species | Number of plants | Zone | Eastings | Northings |
|---|---|---|---|---|
| *Bauhinia cunninghamii* | 5 | 51K | 573037.7 | 8079471.0 |
| *Bauhinia cunninghamii* | 5 | 51K | 573037.8 | 8079429.3 |
| *Bauhinia cunninghamii* | 1 | 51K | 572915.2 | 8079074.5 |
| *Bauhinia cunninghamii* | 1 | 51K | 573982.7 | 8079947.9 |
| *Bauhinia cunninghamii* | 1 | 51K | 573584.8 | 8079960.2 |
| *Bauhinia cunninghamii* | 1 | 51K | 573345.6 | 8079366.7 |
| *Bauhinia cunninghamii* | 1 | 51K | 573293.3 | 8079651.7 |
| *Bauhinia cunninghamii* | 1 | 51K | 571747.5 | 8083102.2 |
| *Bauhinia cunninghamii* | 2 | 51K | 571913.9 | 8083073.1 |
| *Bauhinia cunninghamii* | 1 | 51K | 570290.2 | 8085312.2 |
| *Bauhinia cunninghamii* | 1 | 51K | 570329.6 | 8085310.1 |
| *Bauhinia cunninghamii* | 1 | 51K | 570050.3 | 8083158.0 |
| *Bauhinia cunninghamii* | 1 | 51K | 570132.6 | 8085407.9 |
| *Bauhinia cunninghamii* | 1 | 51K | 570135.6 | 8085330.6 |
| *Bauhinia cunninghamii* | 1 | 51K | 570108.2 | 8085317.1 |
| *Bauhinia cunninghamii* | 1 | 51K | 570108.2 | 8085317.1 |
| *Bauhinia cunninghamii* | 1 | 51K | 570084.9 | 8085303.9 |
| *Bauhinia cunninghamii* | 1 | 51K | 569971.7 | 8085471.1 |
| *Bauhinia cunninghamii* | 1 | 51K | 569959.8 | 8085473.6 |
| *Bauhinia cunninghamii* | 15 | 51K | 574415.5 | 8079995.5 |
| *Bauhinia cunninghamii* | 1 | 51K | 573729.9 | 8080030.8 |
| *Bauhinia cunninghamii* | 1 | 51K | 573738.8 | 8079964.7 |
| *Bauhinia cunninghamii* | 1 | 51K | 573721.4 | 8079899.6 |
| *Bauhinia cunninghamii* | 1 | 51K | 573743.4 | 8079895.4 |
| *Bauhinia cunninghamii* | 1 | 51K | 573754.3 | 8079796.8 |
| *Bauhinia cunninghamii* | 1 | 51K | 573735.9 | 8079791.2 |
| *Bauhinia cunninghamii* | 1 | 51K | 573735.7 | 8079768.7 |
| *Bauhinia cunninghamii* | 1 | 51K | 573767.0 | 8079752.9 |
| *Bauhinia cunninghamii* | 1 | 51K | 573780.9 | 8079731.1 |
| *Bauhinia cunninghamii* | 1 | 51K | 573767.6 | 8079716.0 |
| *Bauhinia cunninghamii* | 1 | 51K | 573753.3 | 8079706.2 |
| *Bauhinia cunninghamii* | 1 | 51K | 573739.3 | 8079696.3 |
| *Bauhinia cunninghamii* | 1 | 51K | 573733.4 | 8079668.4 |
| *Bauhinia cunninghamii* | 1 | 51K | 573711.6 | 8079645.8 |
| *Bauhinia cunninghamii* | 1 | 51K | 573711.3 | 8079624.2 |
| *Bauhinia cunninghamii* | 1 | 51K | 573727.7 | 8079603.8 |
| *Bauhinia cunninghamii* | 1 | 51K | 573728.7 | 8079529.8 |
| *Bauhinia cunninghamii* | 1 | 51K | 573709.9 | 8079418.4 |
| *Bauhinia cunninghamii* | 1 | 51K | 569303.0 | 8083219.4 |
| *Bauhinia cunninghamii* | 1 | 51K | 569330.5 | 8083242.7 |

| Species | Number of plants | Zone | Eastings | Northings |
|---|---|---|---|---|
| *Bauhinia cunninghamii* | 1 | 51K | 569375.4 | 8083348.0 |
| *Bauhinia cunninghamii* | 1 | 51K | 570578.2 | 8082665.3 |
| *Bauhinia cunninghamii* | 1 | 51K | 570600.6 | 8082217.0 |
| *Bauhinia cunninghamii* | 1 | 51K | 570583.4 | 8082235.0 |
| *Bauhinia cunninghamii* | 2 | 51K | 570453.8 | 8082219.8 |
| *Bauhinia cunninghamii* | 1 | 51K | 570401.2 | 8082271.1 |
| *Bauhinia cunninghamii* | 1 | 51K | 570168.7 | 8082421.2 |
| *Bauhinia cunninghamii* | 1 | 51K | 570533.2 | 8082198.3 |
| *Bauhinia cunninghamii* | 1 | 51K | 573010.7 | 8079348.4 |
| *Bauhinia cunninghamii* | 1 | 51K | 574295.2 | 8079765.7 |
| *Bauhinia cunninghamii* | 1 | 51K | 569429.7 | 8083293.3 |
| *Bauhinia cunninghamii* | 1 | 51K | 570177.2 | 8085580.5 |
| *Bauhinia cunninghamii* | 1 | 51K | 622948.9 | 8006392.2 |
| *Bauhinia cunninghamii* | 1 | 51K | 570831.4 | 8081395.5 |
| *Bauhinia cunninghamii* | 1 | 51K | 570798.7 | 8081513.0 |
| *Bauhinia cunninghamii* | 1 | 51K | 570791.3 | 8081536.6 |
| *Bauhinia cunninghamii* | 1 | 51K | 570035.3 | 8082661.3 |
| *Bauhinia cunninghamii* | 1 | 51K | 569947.7 | 8083938.0 |
| *Corymbia zygophylla* | 1 | 51K | 573894.1 | 8080166.2 |
| *Corymbia zygophylla* | 1 | 51K | 573891.2 | 8079919.4 |
| *Corymbia zygophylla* | 1 | 51K | 573985.5 | 8079551.5 |
| *Corymbia zygophylla* | 1 | 51K | 573869.5 | 8079551.3 |
| *Corymbia zygophylla* | 1 | 51K | 573922.9 | 8079512.4 |
| *Corymbia zygophylla* | 1 | 51K | 574027.0 | 8079505.7 |
| *Corymbia zygophylla* | 1 | 51K | 573996.7 | 8079491.9 |
| *Corymbia zygophylla* | 1 | 51K | 573879.0 | 8079370.9 |
| *Corymbia zygophylla* | 1 | 51K | 573873.1 | 8079087.8 |
| *Corymbia zygophylla* | 1 | 51K | 573896.3 | 8079041.1 |
| *Corymbia zygophylla* | 1 | 51K | 572825.7 | 8079613.7 |
| *Corymbia zygophylla* | 1 | 51K | 572770.1 | 8079459.8 |
| *Corymbia zygophylla* | 1 | 51K | 572760.5 | 8079435.5 |
| *Corymbia zygophylla* | 1 | 51K | 572727.8 | 8079411.1 |
| *Corymbia zygophylla* | 1 | 51K | 572734.4 | 8079405.9 |
| *Corymbia grandifolia* | 1 | 51K | 573431.1 | 8080189.0 |
| *Corymbia sp. (indet)* | 1 | 51K | 571713.5 | 8083037.9 |
| *Corymbia zygophylla* | 1 | 51K | 571709.8 | 8083015.4 |
| *Corymbia zygophylla* | 1 | 51K | 571761.6 | 8082751.4 |
| *Corymbia sp. (indet)* | 1 | 51K | 571723.8 | 8082663.0 |
| *Corymbia sp. (indet)* | 1 | 51K | 571151.9 | 8083052.2 |
| *Corymbia zygophylla* | 1 | 51K | 571543.2 | 8083331.5 |

| Species | Number of plants | Zone | Eastings | Northings |
|---|---|---|---|---|
| *Corymbia zygophylla* | 1 | 51K | 571508.9 | 8082918.3 |
| *Corymbia zygophylla* | 1 | 51K | 571326.8 | 8083398.9 |
| *Corymbia zygophylla* | 3 | 51K | 571216.4 | 8083262.5 |
| *Corymbia sp. (indet)* | 1 | 51K | 570934.9 | 8082490.9 |
| *Corymbia zygophylla* | 3 | 51K | 571137.8 | 8082304.4 |
| *Corymbia zygophylla* | 1 | 51K | 571213.4 | 8082412.6 |
| *Corymbia zygophylla* | 1 | 51K | 571229.9 | 8082473.6 |
| *Corymbia zygophylla* | 1 | 51K | 570891.0 | 8083348.3 |
| *Corymbia sp. (indet)* | 1 | 51K | 571605.7 | 8080928.9 |
| *Corymbia sp. (indet)* | 1 | 51K | 571527.6 | 8080915.6 |
| *Corymbia sp. (indet)* | 1 | 51K | 571452.9 | 8080868.7 |
| *Corymbia sp. (indet)* | 1 | 51K | 571369.8 | 8080905.1 |
| *Corymbia sp. (indet)* | 1 | 51K | 571356.4 | 8080888.2 |
| *Corymbia sp. (indet)* | 1 | 51K | 570200.9 | 8085229.3 |
| *Corymbia sp. (indet)* | 1 | 51K | 570006.6 | 8083079.1 |
| *Corymbia zygophylla* | 1 | 51K | 570055.2 | 8085293.1 |
| *Corymbia zygophylla* | 1 | 51K | 573737.9 | 8079346.3 |
| *Corymbia zygophylla* | 1 | 51K | 573760.8 | 8079344.9 |
| *Corymbia zygophylla* | 1 | 51K | 573760.9 | 8078921.9 |
| *Corymbia sp. (indet)* | 1 | 51K | 572174.2 | 8078991.8 |
| *Corymbia sp. (indet)* | 1 | 51K | 572158.6 | 8079053.5 |
| *Corymbia sp. (indet)* | 1 | 51K | 572142.4 | 8079032.6 |
| *Corymbia sp. (indet)* | 1 | 51K | 572068.2 | 8079173.0 |
| *Corymbia sp. (indet)* | 1 | 51K | 571932.0 | 8079312.3 |
| *Corymbia sp. (indet)* | 1 | 51K | 571906.7 | 8079393.2 |
| *Corymbia sp. (indet)* | 1 | 51K | 570949.6 | 8080993.0 |
| *Corymbia sp. (indet)* | 1 | 51K | 570934.9 | 8081040.8 |
| *Corymbia sp. (indet)* | 1 | 51K | 570924.6 | 8081069.5 |
| *Corymbia sp. (indet)* | 1 | 51K | 570855.3 | 8081319.6 |
| *Corymbia sp. (indet)* | 1 | 51K | 570830.1 | 8081490.1 |
| *Corymbia sp. (indet)* | 1 | 51K | 570645.9 | 8082189.0 |
| *Corymbia sp. (indet)* | 1 | 51K | 570585.7 | 8082431.8 |
| *Corymbia sp. (indet)* | 1 | 51K | 570566.4 | 8082483.5 |
| *Corymbia sp. (indet)* | 1 | 51K | 570562.5 | 8082511.6 |
| *Corymbia sp. (indet)* | 1 | 51K | 570542.2 | 8082593.5 |
| *Corymbia sp. (indet)* | 1 | 51K | 570519.0 | 8082688.3 |
| *Corymbia sp. (indet)* | 1 | 51K | 569723.4 | 8085746.1 |
| *Corymbia dichromophloia* | 1 | 51K | 573621.9 | 8079745.5 |
| *Corymbia dichromophloia* | 1 | 51K | 573597.9 | 8079714.1 |
| *Corymbia dichromophloia* | 1 | 51K | 573594.5 | 8079409.9 |

| Species | Number of plants | Zone | Eastings | Northings |
|---|---|---|---|---|
| *Corymbia dichromophloia* | 1 | 51K | 573276.8 | 8079567.6 |
| *Corymbia dichromophloia* | 1 | 51K | 573334.2 | 8079265.5 |
| *Corymbia dichromophloia* | 1 | 51K | 573370.0 | 8079298.6 |
| *Corymbia dichromophloia* | 1 | 51K | 573368.4 | 8079307.3 |
| *Corymbia dichromophloia* | 1 | 51K | 573308.6 | 8079636.1 |
| *Corymbia dichromophloia* | 1 | 51K | 573268.8 | 8079670.6 |
| *Corymbia dichromophloia* | 1 | 51K | 573246.6 | 8079668.5 |
| *Corymbia dichromophloia* | 1 | 51K | 573276.0 | 8079786.8 |
| *Corymbia dichromophloia* | 1 | 51K | 573357.1 | 8079806.2 |
| *Corymbia dichromophloia* | 1 | 51K | 573410.3 | 8079946.4 |
| *Corymbia dichromophloia* | 1 | 51K | 573379.6 | 8080041.9 |
| *Corymbia dichromophloia* | 1 | 51K | 573158.9 | 8079986.2 |
| *Corymbia dichromophloia* | 1 | 51K | 573179.5 | 8079710.7 |
| *Corymbia dichromophloia* | 1 | 51K | 573280.4 | 8079206.5 |
| *Corymbia dichromophloia* | 1 | 51K | 573185.0 | 8079293.3 |
| *Corymbia dichromophloia* | 1 | 51K | 573126.2 | 8079597.2 |
| *Corymbia dichromophloia* | 1 | 51K | 571721.0 | 8083195.4 |
| *Corymbia dichromophloia* | 1 | 51K | 571577.5 | 8083156.0 |
| *Corymbia dichromophloia* | 1 | 51K | 571171.3 | 8083364.9 |
| *Corymbia dichromophloia* | 1 | 51K | 571165.4 | 8083314.4 |
| *Corymbia dichromophloia* | 1 | 51K | 571142.3 | 8083296.5 |
| *Corymbia dichromophloia* | 1 | 51K | 571166.8 | 8083155.9 |
| *Corymbia dichromophloia* | 1 | 51K | 571074.3 | 8082903.0 |
| *Corymbia dichromophloia* | 1 | 51K | 571044.3 | 8082965.3 |
| *Corymbia dichromophloia* | 1 | 51K | 571059.2 | 8083081.6 |
| *Corymbia dichromophloia* | 1 | 51K | 570965.0 | 8082421.7 |
| *Corymbia dichromophloia* | 1 | 51K | 570337.8 | 8085232.1 |
| *Corymbia dichromophloia* | 1 | 51K | 570090.7 | 8085226.6 |
| *Corymbia dichromophloia* | 1 | 51K | 570198.5 | 8083098.4 |
| *Corymbia dichromophloia* | 1 | 51K | 570127.1 | 8083087.6 |
| *Corymbia dichromophloia* | 1 | 51K | 573128.4 | 8079958.0 |
| *Corymbia greeniana* | 1 | 51K | 570228.2 | 8083138.0 |
| *Corymbia greeniana* | 1 | 51K | 570111.4 | 8083093.4 |
| *Corymbia greeniana* | 1 | 51K | 573589.7 | 8079791.1 |
| *Corymbia greeniana* | 1 | 51K | 573618.9 | 8079761.5 |
| *Corymbia greeniana* | 1 | 51K | 573527.9 | 8079201.2 |
| *Corymbia greeniana* | 1 | 51K | 573555.3 | 8078981.3 |
| *Corymbia greeniana* | 1 | 51K | 573484.7 | 8078963.4 |
| *Corymbia greeniana* | 1 | 51K | 573349.3 | 8079205.7 |
| *Corymbia greeniana* | 1 | 51K | 573353.1 | 8079212.0 |

| Species | Number of plants | Zone | Eastings | Northings |
|---|---|---|---|---|
| *Corymbia greeniana* | 1 | 51K | 573304.5 | 8079587.2 |
| *Corymbia greeniana* | 1 | 51K | 573248.8 | 8079850.0 |
| *Corymbia greeniana* | 1 | 51K | 573192.2 | 8079780.2 |
| *Corymbia greeniana* | 1 | 51K | 573176.5 | 8079762.5 |
| *Corymbia greeniana* | 1 | 51K | 573184.1 | 8079743.5 |
| *Corymbia greeniana* | 1 | 51K | 573280.3 | 8079182.7 |
| *Corymbia greeniana* | 1 | 51K | 570970.5 | 8082408.5 |
| *Corymbia greeniana* | 1 | 51K | 570966.2 | 8082441.8 |
| *Corymbia greeniana* | 1 | 51K | 571528.8 | 8082379.7 |
| *Corymbia greeniana* | 1 | 51K | 571394.2 | 8082238.7 |
| *Corymbia opaca* | 2 | 51K | 574322.5 | 8079269.2 |
| *Corymbia opaca* | 2 | 51K | 574334.5 | 8079314.1 |
| *Corymbia opaca* | 1 | 51K | 574336.2 | 8079358.0 |
| *Corymbia opaca* | 1 | 51K | 574294.3 | 8079423.1 |
| *Corymbia opaca* | 1 | 51K | 574285.5 | 8079472.1 |
| *Corymbia opaca* | 10 | 51K | 574281.4 | 8079507.6 |
| *Corymbia opaca* | 4 | 51K | 574386.5 | 8079601.2 |
| *Corymbia opaca* | 20 | 51K | 574449.4 | 8079571.6 |
| *Corymbia opaca* | 3 | 51K | 574374.7 | 8079719.1 |
| *Corymbia opaca* | 1 | 51K | 574365.2 | 8079754.2 |
| *Corymbia opaca* | 3 | 51K | 574348.7 | 8079781.0 |
| *Corymbia opaca* | 1 | 51K | 574364.7 | 8079845.5 |
| *Corymbia opaca* | 1 | 51K | 574327.3 | 8080187.6 |
| *Corymbia opaca* | 1 | 51K | 574146.2 | 8079625.4 |
| *Corymbia opaca* | 1 | 51K | 574154.3 | 8079591.2 |
| *Corymbia opaca* | 1 | 51K | 574146.4 | 8079602.2 |
| *Corymbia opaca* | 5 | 51K | 574143.0 | 8079487.7 |
| *Corymbia opaca* | 5 | 51K | 574149.2 | 8079457.6 |
| *Corymbia opaca* | 1 | 51K | 572917.2 | 8079720.7 |
| *Corymbia opaca* | 1 | 51K | 571879.9 | 8082941.2 |
| *Corymbia opaca* | 7 | 51K | 571131.2 | 8083351.4 |
| *Corymbia opaca* | 7 | 51K | 571132.7 | 8083275.9 |
| *Eucalyptus miniata* | 1 | 51K | 574386.5 | 8078932.5 |
| *Eucalyptus miniata* | 1 | 51K | 574398.7 | 8078979.4 |
| *Eucalyptus miniata* | 1 | 51K | 574383.7 | 8079120.0 |
| *Eucalyptus miniata* | 1 | 51K | 574344.0 | 8079233.4 |
| *Eucalyptus miniata* | 1 | 51K | 574335.5 | 8079280.6 |
| *Eucalyptus miniata* | 2 | 51K | 574322.3 | 8079357.8 |
| *Eucalyptus miniata* | 1 | 51K | 574277.7 | 8079447.4 |
| *Eucalyptus miniata* | 4 | 51K | 574331.6 | 8079542.9 |

| Species | Number of plants | Zone | Eastings | Northings |
|---|---|---|---|---|
| *Eucalyptus miniata* | 15 | 51K | 574373.7 | 8080003.5 |
| *Eucalyptus miniata* | 14 | 51K | 574344.6 | 8080085.9 |
| *Eucalyptus miniata* | 1 | 51K | 574318.8 | 8080178.4 |
| *Eucalyptus miniata* | 1 | 51K | 574153.3 | 8080138.6 |
| *Eucalyptus miniata* | 1 | 51K | 574135.4 | 8080106.8 |
| *Eucalyptus miniata* | 3 | 51K | 574137.7 | 8080008.8 |
| *Eucalyptus miniata* | 1 | 51K | 572914.8 | 8079722.5 |
| *Eucalyptus miniata* | 1 | 51K | 573909.2 | 8080242.9 |
| *Eucalyptus miniata* | 1 | 51K | 571431.9 | 8083182.0 |
| *Eucalyptus miniata* | 1 | 51K | 571409.4 | 8082962.8 |
| *Eucalyptus miniata* | 1 | 51K | 571453.2 | 8082958.2 |
| *Eucalyptus miniata* | 1 | 51K | 571511.2 | 8082988.8 |
| *Eucalyptus miniata* | 1 | 51K | 571539.4 | 8083225.4 |
| *Eucalyptus miniata* | 1 | 51K | 571475.3 | 8083227.4 |
| *Eucalyptus miniata* | 1 | 51K | 571295.7 | 8083455.9 |
| *Eucalyptus miniata* | 1 | 51K | 571217.6 | 8083329.9 |
| *Eucalyptus miniata* | 1 | 51K | 571230.0 | 8083293.8 |
| *Eucalyptus miniata* | 1 | 51K | 571274.0 | 8083182.8 |
| *Eucalyptus miniata* | 1 | 51K | 571278.9 | 8083109.3 |
| *Eucalyptus miniata* | 1 | 51K | 571320.0 | 8083034.4 |
| *Eucalyptus miniata* | 1 | 51K | 571223.2 | 8082951.3 |
| *Eucalyptus miniata* | 1 | 51K | 571251.2 | 8083041.0 |
| *Eucalyptus miniata* | 1 | 51K | 571250.8 | 8083040.8 |
| *Eucalyptus miniata* | 1 | 51K | 570141.7 | 8082684.7 |
| *Eucalyptus miniata* | 1 | 51K | 571057.7 | 8082581.7 |
| *Eucalyptus miniata* | 1 | 51K | 571941.2 | 8083216.2 |
| *Eucalyptus miniata* | 1 | 51K | 571937.1 | 8083149.6 |
| *Eucalyptus miniata* | 1 | 51K | 571939.8 | 8083123.5 |
| *Eucalyptus miniata* | 1 | 51K | 571906.7 | 8083055.2 |
| *Eucalyptus miniata* | 1 | 51K | 571910.6 | 8083047.1 |
| *Eucalyptus miniata* | 1 | 51K | 571899.4 | 8083016.7 |
| *Eucalyptus miniata* | 1 | 51K | 571893.1 | 8082830.9 |
| *Eucalyptus miniata* | 1 | 51K | 571875.5 | 8082817.9 |
| *Eucalyptus miniata* | 1 | 51K | 571898.1 | 8082689.9 |
| *Eucalyptus miniata* | 1 | 51K | 571764.4 | 8082751.5 |
| *Eucalyptus miniata* | 1 | 51K | 571769.4 | 8082781.1 |
| *Eucalyptus miniata* | 1 | 51K | 571761.7 | 8082822.5 |
| *Eucalyptus miniata* | 1 | 51K | 571811.5 | 8082865.8 |
| *Eucalyptus miniata* | 1 | 51K | 571805.2 | 8082956.2 |
| *Eucalyptus miniata* | 1 | 51K | 571430.5 | 8082247.1 |

| Species | Number of plants | Zone | Eastings | Northings |
|---|---|---|---|---|
| *Eucalyptus miniata* | 1 | 51K | 571451.0 | 8082280.1 |
| *Eucalyptus miniata* | 1 | 51K | 571238.4 | 8082515.5 |
| *Eucalyptus miniata* | 1 | 51K | 571362.3 | 8082535.2 |
| *Eucalyptus miniata* | 1 | 51K | 571331.9 | 8082455.5 |
| *Eucalyptus miniata* | 1 | 51K | 571335.0 | 8082441.1 |
| *Eucalyptus miniata* | 1 | 51K | 571291.7 | 8082349.1 |
| *Eucalyptus miniata* | 2 | 51K | 571407.8 | 8081222.5 |
| *Eucalyptus miniata* | 1 | 51K | 570847.6 | 8083294.6 |
| *Eucalyptus miniata* | 1 | 51K | 570800.8 | 8083269.3 |
| *Eucalyptus miniata* | 1 | 51K | 570767.9 | 8083208.9 |
| *Eucalyptus miniata* | 1 | 51K | 570074.7 | 8083307.5 |
| *Eucalyptus miniata* | 1 | 51K | 569922.1 | 8083298.4 |
| *Eucalyptus miniata* | 2 | 51K | 570462.7 | 8082540.4 |

# Appendix E

## Fauna field data

Species lists (Broome, Derby and Camballin, and Halls Creek)

Bat call analyses results

Remote camera captures

Northern Brushtail Possum Habitat trees

Bilby burrows

Bilby evidence

Likelihood of occurrence assessment

**Species lists**

**Fauna recorded during the field survey – Broome Sites**

| Scientific name | Common Name | Status | Broome Site G | Broome Site H | Broome Site F |
|---|---|---|---|---|---|
| **Birds** | | | | | |
| *Ardeotis australis* | Australian Bustard | | | | 1 |
| *Falco longipennis* | Australian Hobby | | | 1 | |
| *Cracticus tibicen* | Australian Magpie | | | 4 | 2 |
| *Aegotheles cristatus* | Australian Owlet-nightjar | | 7 | 5 | |
| *Threskiornis molucca* | Australian White Ibis | | | | 12 |
| *Geopelia humeralis* | Bar-shouldered Dove | | | 2 | |
| *Sugomel niger* | Black Honeyeater | | | | 2 |
| *Milvus migrans* | Black Kite | | 1 | | 7 |
| *Hamirostra melanosternon* | Black-breasted Buzzard | | | 2 | |
| *Chalcites osculans* | Black-eared Cuckoo | | | 1 | |
| *Coracina novaehollandiae* | Black-faced Cuckoo-shrike | | 4 | 2 | 3 |
| *Artamus cinereus* | Black-faced Woodswallow | | 4 | | 13 |
| *Dacelo leachii* | Blue-winged Kookaburra | | 4 | 1 | 1 |
| *Haliastur indus* | Brahminy Kite | | | | 2 |
| *Falco berigora* | Brown Falcon | | | | 1 |
| *Accipiter fasciatus* | Brown Goshawk | | 1 | | |
| *Lichmera indistincta* | Brown Honeyeater | | 8 | 6 | 7 |
| *Coturnix ypsilophora* | Brown Quail | | 2 | 4 | 2 |
| *Burhinus grallarius* | Bush Stone-curlew | | | | 1 |
| *Scythrops novaehollandiae* | Channel-billed Cuckoo | | 3 | | |
| *Accipiter cirrocephalus* | Collared Sparrowhawk | | 1 | 1 | |
| *Ocyphaps lophotes* | Crested Pigeon | | 5 | 8 | 1 |
| *Geopelia cuneata* | Diamond Dove | | 4 | 4 | 1 |
| *Eurystomus orientalis* | Dollarbird | | 1 | 2 | 3 |
| *Taeniopygia bichenovii* | Double-barred Finch | | 4 | 2 | 4 |

| Scientific name | Common Name | Status | Broome Site G | Broome Site H | Broome Site F |
|---|---|---|---|---|---|
| *Tyto javanica* | Eastern Barn Owl | | 1 | | |
| *Ardea modesta* | Eastern Great Egret | | | | 1 |
| *Pandion cristatus* | Eastern Osprey | | | | 1 |
| *Apus pacificus* | Fork-tailed Swift | MI | | | 150 |
| *Eolophus roseicapillus* | Galah | | 4 | | 2 |
| *Ptilonorhynchus nuchalis* | Great Bowerbird | | 1 | 1 | 2 |
| *Colluricincla harmonica* | Grey Shrike-thrush | | 1 | 1 | 2 |
| *Chalcites basalis* | Horsfield's Bronze-Cuckoo | | | 1 | 1 |
| *Turnix velox* | Little Button-quail | | 1 | 1 | 2 |
| *Cacatua sanguinea* | Little Corella | | 5 | 2 | 14 |
| *Hieraaetus morphnoides* | Little Eagle | | 1 | | |
| *Egretta garzetta* | Little Egret | | | | 1 |
| *Philemon citreogularis* | Little Friarbird | | | | 6 |
| *Poephila acuticauda* | Long-tailed Finch | | 2 | | 4 |
| *Grallina cyanoleuca* | Magpie-lark | | 2 | 2 | 4 |
| *Dicaeum hirundinaceum* | Mistletoebird | | 1 | 2 | 2 |
| *Falco cenchroides* | Nankeen Kestrel | | 1 | | 2 |
| *Geopelia striata* | Peaceful Dove | | 6 | 5 | 3 |
| *Centropus phasianinus* | Pheasant Coucal | | | | 1 |
| *Cracticus nigrogularis* | Pied Butcherbird | | 2 | 2 | 2 |
| *Merops ornatus* | Rainbow Bee-eater | | 3 | 2 | 11 |
| *Trichoglossus haematodus* | Rainbow Lorikeet | | 2 | 2 | 4 |
| *Malurus melanocephalus* | Red-backed Fairy-wren | | | | 4 |
| *Calyptorhynchus banksii* | Red-tailed Black-Cockatoo | | | 4 | 8 |
| *Malurus elegans* | Red-winged Fairy-wren | | 4 | 6 | |
| *Aprosmictus erythropterus* | Red-winged Parrot | | 7 | 2 | 2 |
| *Myiagra inquieta* | Restless Flycatcher | | | 2 | |
| *Pachycephala rufiventris* | Rufous Whistler | | 2 | 2 | 1 |

| Scientific name | Common Name | Status | Broome Site G | Broome Site H | Broome Site F |
|---|---|---|---|---|---|
| *Conopophila rufogularis* | Rufous-throated Honeyeater | | | | 1 |
| *Todiramphus sanctus* | Sacred Kingfisher | | 1 | | |
| *Philemon argenticeps* | Silver-crowned Friarbird | | 2 | 4 | 3 |
| *Lichenostomus virescens* | Singing Honeyeater | | 5 | 3 | 12 |
| *Ninox novaeseelandiae* | Southern Boobook | | 4 | 2 | |
| *Pardalotus striatus* | Striated Pardalote | | | | 1 |
| *Podargus strigoides* | Tawny Frogmouth | | | | 1 |
| *Corvus orru* | Torresian Crow | | 2 | 2 | 6 |
| *Psitteuteles versicolor* | Varied Lorikeet | | | | 2 |
| *Malurus lamberti* | Variegated Fairy-wren | | 5 | 4 | 9 |
| *Smicrornis brevirostris* | Weebill | | 2 | 6 | |
| *Haliastur sphenurus* | Whistling Kite | | 1 | 1 | 2 |
| *Artamus leucorynchus* | White-breasted Woodswallow | | | 5 | 1 |
| *Pomatostomus superciliosus* | White-browed Babbler | | 7 | 6 | 4 |
| *Egretta novaehollandiae* | White-faced Heron | | | | 2 |
| *Lichenostomus unicolor* | White-gaped Honeyeater | | | | 2 |
| *Gerygone albogularis* | White-throated Gerygone | | 1 | 3 | |
| *Rhipidura leucophrys* | Willie Wagtail | | 2 | 2 | 1 |
| *Zosterops luteus* | Yellow White-eye | | | 6 | |
| *Taeniopygia guttata* | Zebra Finch | | 4 | | 4 |
| **Mammals** | | | | | |
| *Macropus agilis* | Agile wallaby | | 33 | 35 | 1 |
| *Macrotis lagotis* | Bilby | VU | x | x | x |
| *Felis catus* | Cat | Int | 1 | 1 | |
| *Trichosurus vulpecula* | Common Brushtail Possum | | | | 1 |
| *Bos taurus* | Cow | Int | | 1 | |
| *Canis familiaris* | Dingo, Domestic Dog | Int | 1 | 1 | |
| *Trichosurus vulpecula arnhemensis* | Northern Brushtail Possum | VU | 1, scat | 1 scat, 1 | |

| Scientific name | Common Name | Status | Broome Site G | Broome Site H | Broome Site F |
|---|---|---|---|---|---|
| *Saccolaimus saccolaimus* | Bare-rumped Sheath-tailed Bat | VU / P3 | 1 | 2 | 6 |
| *Onychogalea unguifera* | Northern Nailtail Wallaby | | | 1 | |
| *Tachyglossus aculeatus* | Short-beaked Echidna | | | | |
| **Reptiles** | | | | | |
| *Varanus tristis* | Black-headed Monitor | | | 1 | 1 |
| *Aspidites melanocephalus* | Black-headed Python | | | 1 | |
| *Lialis burtonis* | Burton's Legless Lizard | | | | 1 |
| *Heteronotia binoei* | Bynoe's Gecko | | | 1 | 2 |
| *Ctenophorus nuchalis* | Central Netted Dragon | | 1 | | |
| *Antaresia childreni* | Children's Python | | | | 2 |
| *Tiliqua scincoides* | Common Blue-tongued Skink | | | | 1 |
| *Menetia greyii* | Common Dwarf Skink | | 1 | 1 | |
| *Pogona minor* | Dwarf Bearded Dragon | | | 1 | 1 |
| *Ctenotus robustus* | Eastern Striped Skink | | | | 1 |
| *Chlamydosaurus kingii* | Frilled Lizard | | 1 | 1 | |
| *Amphibolurus gilberti* | Gilbert's Dragon | | | | 5 |
| Ctenotus pantherinus | Leopard Ctenotus | | 1 | 3 | 1 |
| *Morethia ruficauda* | Lined Firetail Skink | | 2 | 5 | 1 |
| *Gehyra pilbra* | Little Termiteria Dtella | | 4 | 1 | |
| *Pseudechis australis* | Mulga Snake | | | 1 | |
| *Eremiascincus isolepis* | Northern Bar-lipped Skink | | | | 1 |
| *Tiliqua scincoides intermedia* | Northern Blue-tongue | | 1 | | |
| *Proablepharus tenuis* | Northern Soil-crevice Skink | | | | 1 |
| *Strophurus ciliaris* | Northern Spiny-tailed Gecko | | 1 | 1 | |
| *Diporiphora pindan* | Pindan Two-line Dragon | | 5 | 1 | 1 |
| *Gehyra gemina* | Plain Tree Dtella | | | 1 | |
| *Cryptoblepharus tytthos* | Pygmy Snake-eyed Skink | | 1 | 3 | |
| *Carlia rufilatus* | Red-sided Rainbow-skink | | | 4 | 1 |

| Scientific name | Common Name | Status | Broome Site G | Broome Site H | Broome Site F |
|---|---|---|---|---|---|
| *Gehyra kimberleyi* | Robust Termitaria Dtella | | | 1 | |
| *Ctenotus saxatilis* | Rock Ctenotus | | 1 | 1 | |
| *Varanus gouldii* | Sand Goanna | | 5 | 1 | 9 |
| *Carlia munda* | Shaded-litter Rainbow-skink | | 3 | 8 | 1 |
| *Ctenotus superciliaris* | Sharp-browed Ctenotus | | | | 6 |
| *Lerista bipes* | Western Two-toed Slider | | 1 | 1 | |
| **Amphibia** | | | | | |
| *Litoria rubella* | Desert Tree Frog | | | 1 | 1 |
| *Litoria caerulea* | Green Tree Frog | | 2 | 3 | 1 |
| *Cyclorana australis* | Northern Snapping Frog | | | 1 | 3 |

**Fauna recorded during the field survey – Derby and Camballin sites**

| Scientific name | Common Name | Status | Area P | Area I | Area D | Area C | Area O | Camballin |
|---|---|---|---|---|---|---|---|---|
| **Birds** | | | | | | | | |
| *Tachybaptus novaehollandiae* | Australasian Grebe | - | | | observed | | | |
| *Ardeotis australis* | Australian Bustard | - | | | foot prints | | | |
| *Cissomela pectoralis* | Banded Honeyeater | - | observed | | | | | |
| *Geopelia humeralis* | Bar-shouldered Dove | - | heard call | heard call | heard call, cam | heard call | observed | heard call |
| *Milvus migrans* | Black Kite | - | observed | observed | observed | | observed | observed |
| *Coracina novaehollandiae* | Black-faced Cuckoo-shrike | - | observed | observed | observed | observed | observed | |
| *Artamus cinereus* | Black-faced Woodswallow | - | | | | | | observed |
| *Dacelo leachii* | Blue-winged Kookuburra | - | observed | observed | heard call | | | |
| *Ninox boobook* | Boobook Owl | - | | | camera | | | observed |
| *Falco berigora* | Brown Falcon | - | | | observed | | observed | observed |
| *Accipiter fasciatus* | Brown Goshawk | - | observed | | | | | |
| *Lichmera indistincta* | Brown Honeyeater | - | heard call | heard call | heard call | heard call | observed | observed |
| *Synoicus ypsilophorus* | Brown Quail | - | | | | observed | observed | |
| *Cacomantis variolosus* | Brush Cuckoo | - | heard call | | | | | |
| *Melopsittacus undulatus* | Budgerigar | - | | | heard call | | | heard call |
| *Burhinus grallarius* | Bush Stone-curlew | - | tracks | | foot prints | foot prints | | |
| *Nymphicus hollandicus* | Cockatiel | - | | | | heard call | | |
| *Todiramphus chloris* | Collared Kingfisher | - | | | observed | | | |
| *Accipiter cirrocephalus* | Collared Sparrowhawk | - | observed | | observed | | | |
| *Ocyphaps lophotes* | Crested Pigeon | - | | observed | observed, cam | observed | observed | observed |
| *Eurystomus orientalis* | Dollarbird | - | | | heard call | observed | observed | |
| *Stizoptera bichenovii* | Double-barred Finch | - | | | | heard call | heard call | |
| *Apus pacificus* | Fork-tailed Swift | IA | | | | | observed | |
| *Eolophus roseicapilla* | Galah | - | heard call | | heard call | | | |
| *Chlamydera nuchalis* | Great Bowerbird | - | heard call | | heard call | | observed | |

| Scientific name | Common Name | Status | Area P | Area I | Area D | Area C | Area O | Camballin |
|---|---|---|---|---|---|---|---|---|
| *Pomatostomus temporalis* | Grey-crowned Babbler | - | observed | heard call | observed | observed | observed | |
| *Colluricincla harmonica* | Grey Shrike-thrush | - | heard call | | observed | | observed | |
| *Anas gracilis* | Grey Teal | - | | | observed | | | |
| *Chalcites basalis* | Horsefield's Bronze Cuckoo | - | heard call | heard call | | | | heard call |
| *Cacatua sanguinea sanguinea* | Little Corella | - | observed | | heard call | heard call | | |
| *Hieraaetus morphnoides* | Little Eagle | - | | observed | | | | |
| *Philemon citreogularis* | Little Friarbird | - | observed | observed | observed | observed | observed | |
| *Vanellus miles miles* | Masked Lapwing | - | heard call | | | | observed | |
| *Dicaeum hirundinaceum* | Mistletoebird | - | observed | | | | | observed |
| *Grallina cyanoleuca* | Magpie-Lark | - | observed, cam | observed | observed | observed | observed | |
| *Falco cenchroides* | Nankeen Kestrel | - | | observed | | | | |
| *Oriolus sagittatus* | Olive-backed Oriole | - | heard call | | heard call | heard call | heard call | |
| *Cuculus optatus* | Oriental Cuckoo | IA | | | observed | | | |
| Anas superciliosa | Pacific Black Duck | - | | | observed | | | |
| *Geopelia placida* | Peaceful Dove | - | observed | | heard call | heard call | | heard call |
| *Centropus phasianinus* | Pheasant Coucal | - | | | | | observed | |
| *Cracticus nigrogularis* | Pied Butcherbird | - | observed | | | observed | observed | observed |
| *Merops ornatus* | Rainbow Bee-eater | - | heard call | observed | heard call | | heard call | observed |
| *Todiramphus pyrrhopygius* | Red-backed Kingfisher | - | | | | observed | | |
| *Trichoglossus haematodus rubritorquis* | Red-collared Lorikeet | - | observed | | observed | heard call | heard call | |
| *Calyptorhynchus banskii sameulii* | Red-tailed Black Cockatoo | - | | | | heard call | observed | |
| *Aprosmictus erythropterus* | Red-winged Parrot | - | observed | | | observed | | observed |
| *Conopophila rufogularis* | Rufous-throated Honey-eater | - | heard call | | | | | |
| *Pachycephala rufiventris* | Rufous Whistler | - | heard call | | | heard call | heard call | |
| *Todiramphus sanctus* | Sacred Kingfisher | - | observed | | camera | observed | observed | observed |
| *Gavicalis virescens* | Singing Honeyeater | - | heard call | | heard call, cam | heard call | observed | |

| Scientific name | Common Name | Status | Area P | Area I | Area D | Area C | Area O | Camballin |
|---|---|---|---|---|---|---|---|---|
| *Pardalotus striatus* | Striated Pardalote | - | | heard call | | | | |
| *Podargus strigoides* | Tawny Frogmouth | - | | remains | | remains | | |
| *Corvus orru* | Torresian Crow | - | observed | observed | | observed | observed | heard call |
| *Malurus lamberti* | Variegated Fairy-wren | - | observed | | | heard call | observed | observed |
| Aquila audax | Wedge-tailed Eagle | - | observed | | | | | observed |
| *Rhipidura leucophrys* | Willie Wagtail | - | heard call | observed | | | | observed |
| *Haliastur sphenurus* | Whistling Kite | - | | observed | observed | observed | observed | |
| *Stomiopera unicolor* | White-gaped Honeyeater | - | heard call | | | | | |
| *Gerygone olivacea* | White-throated Gerygone | - | heard call | | | observed | observed | |
| *Manorina flavigula* | Yellow-throated Minor | - | observed | | | observed | heard call | |
| *Ptilotula flavescens* | Yellow-tinted Honeyeater | - | heard call | | | | | |
| *Taeniopygia castanotis* | Zebra Finch | - | observed | | observed | | | observed |
| **Mammals** | | | | | | | | |
| *Chaerephon jobensis* | Greater Northern Free-tailed Bat | - | call recorded | | call recorded | call recorded | call recorded | |
| *Chalinolobus gouldii* | Gould's Wattled Bat | - | call recorded | call recorded | call recorded | call recorded | | |
| *Nyctophilus sp.* | Long-eared Bat | - | call recorded | | call recorded | call recorded | | |
| *Ozimops cobourgianus* | Northern Coastal Free-tailed Bat | P1 | call recorded | call recorded | call recorded | call recorded | call recorded | |
| *Pipistrellus westralis* | Northern Pipistrelle | - | call recorded | call recorded | call recorded | call recorded | call recorded | |
| *Saccolaimus flaviventris* | Yellow-bellied Sheath-tailed Bat | - | call recorded | call recorded | call recorded | call recorded | call recorded | |
| *Scotorepens greyii* | Little Broad-nosed Bat | - | call recorded | call recorded | call recorded | call recorded | call recorded | |
| *Taphozous georgianus* | Common Sheath-tailed Bat | - | call recorded | call recorded | call recorded | call recorded | call recorded | |
| *Macropus agilis* | Agile Wallaby | - | observed, cam | observed, cam | observed, cam | observed, cam | observed | scat |
| *Rattus rattus* | Black Rat | Int | | | | | remains | |
| *Felis catus* | Cat | Int | | | tracks | camera | | |
| *Canis familiaris* | Dog | Int | tracks | | | Camera | | |
| *Equus asinus* | Donkey | Int | | | | | | scat |

| Scientific name | Common Name | Status | Area P | Area I | Area D | Area C | Area O | Camballin |
|---|---|---|---|---|---|---|---|---|
| *Macropus robustus* | Euro | - | observed | | | | | |
| **Reptiles** | | | | | | | | |
| *Varanus tristis* | Black Headed Monitor | - | observed | camera | | tracks | | |
| *Tiliqua scincoides intermedia* | Northern Blue-tongue Skink | CR | tracks | | | tracks | tracks, observed | |
| *Lerista griffini* | Griffin's Sand Skink | - | tracks | | observed | observed | | |
| *Carlia munda* | Rainbow Skink | - | | | | | | |
| *Chlamydosaurus kingii* | Frilled Dragon | - | | slough | tracks | | | |
| *V.panoptes* | Spotted Monitor | - | tracks | | | observed | | |
| *Antaresia childreni* | Children's Python | - | | | | | slough | |
| *Menetia greyii* | Dwarf Skink | - | observed | observed | observed | observed | observed | observed |
| *Ctenophorus isolepis* | Military Dragon | - | | | | | | observed |
| *Ctenotus inornatus* | Striped Skink | - | | | | | | observed |
| *Varanus scalaris* | Spotted Tree Dragon | - | | | | remains | | |
| *Gehyra variegata* | Tree Dtella | - | observed | | observed | | observed | |
| *Eremiascincus isolepis* | Northern Bar-lipped Skink | - | | | | camera | | |
| *Lialis burtonis* | Burton's Legless Lizard | - | | | | camera | | |
| **Amphibia** | | | | | | | | |
| *Litoria caerulea* | Green Tree Frog | - | observed | | | | | |
| *Rhinella marina* | Cane Toad | Int | | | observed | | | |

**Fauna recorded during the field survey – Hall's Creek Sites**

| Scientific name | Common Name | Status | Site C3 | Site C |
|---|---|---|---|---|
| **Birds** | | | | |
| *Gymnorhina tibicen* | Australian Magpie | - | x | |
| *Geopelia humeralis* | Bar-shouldered Dove | - | x | |
| *Milvus migrans* | Black Kite | - | | x |
| *Hamirostra melanosternon* | Black-breasted Buzzard | - | x | |
| *Coracina novaehollandiae* | Black-faced Cuckoo-shrike | - | | x |
| *Artamus cinereus* | Black-faced Woodswallow | - | x | |
| *Falco berigora* | Brown Falcon | - | x | |
| *Accipiter fasciatus* | Brown Goshawk | - | x | |
| *Lichmera indistincta* | Brown Honeyeater | - | | x |
| *Synoicus ypsilophorus* | Brown Quail | - | x | |
| *Melopsittacus undulatus* | Budgerigar | - | x | x |
| *Nymphicus hollandicus* | Cockatiel | - | | x |
| *Accipiter cirrocephalus* | Collared Sparrowhawk | - | | x |
| *Oreoica gutturalis* | Crested Bellbird | - | | x |
| *Ocyphaps lophotes* | Crested Pigeon | - | x | |
| *Geopelia cuneata* | Diamond Dove | - | x, cam | x |
| *Eurystomus orientalis* | Dollarbird | - | | x |
| *Stizoptera bichenovii* | Double-barred Finch | - | | cam |
| *Eolophus roseicapilla* | Galah | - | x | x |
| *Chloebia gouldiae* | Gouldian Finch | EN | | x |
| *Chlamydera nuchalis* | Great Bowerbird | - | | x |
| *Ptilotula plumula* | Grey-fronted Honeyeater | - | | x |
| *Pomatostomus temporalis* | Grey-crowned Babbler | - | x | x |
| *Chalcites basalis* | Horsefield's Bronze Cuckoo | - | | x |
| *Poephila acuticauda* | Long-tailed Finch | - | | x |
| *Grallina cyanoleuca* | Mudlark | - | x | x, cam |

| Scientific name | Common Name | Status | Site C3 | Site C |
|---|---|---|---|---|
| *Falco cenchroides* | Nankeen Kestrel | - | x | x |
| *Geopelia placida* | Peaceful Dove | - | x | x |
| *Heteromunia pectoralis* | Pictorella Mannikin | - | | x |
| *Cracticus nigrogularis* | Pied Butcherbird | - | x | x |
| *Merops ornatus* | Rainbow Bee-eater | - | | x |
| *Malurus melanocephalus* | Red-backed Fairywren | - | x | |
| *Todiramphus pyrrhopygius* | Red-backed Kingfisher | - | | x |
| *Calyptorhynchus banskii sameulii* | Red-tailed Black Cockatoo | - | | x |
| *Aprosmictus erythropterus* | Red-winged Parrot | - | | x |
| *Pachycephala rufiventris* | Rufous Whistler | - | | x |
| *Poodytes carteri* | Spinifexbird | - | | x |
| *Pardalotus striatus* | Striated Pardalote | - | x | x |
| *Corvus orru* | Torresian Crow | - | | x |
| *Malurus lamberti* | Variegated Fairy-wren | - | | x |
| *Haliastur sphenurus* | Whistling Kite | - | | x |
| *Egretta novaehollandiae* | White-faced Heron | - | | x |
| *Rhipidura leucophrys* | Willie Wagtail | - | x | x |
| *Manorina flavigula* | Yellow-throated Minor | - | x | x |
| *Taeniopygia castanotis* | Zebra Finch | - | x | x |
| **Mammals** | | | | |
| *Chaerephon jobensis* | Greater Northern Free-tailed Bat | - | | call recorded |
| *Chalinolobus gouldii* | Gould's Wattled Bat | - | call recorded | call recorded |
| *Chalinolobus nigrogriseus* | Hoary Wattled Bat | - | | |
| *Miniopterus orianae orianae* | Northern Bent-winged Bat | - | | |
| *Nyctophilus* sp. | Long-eared Bat species | - | call recorded | call recorded |
| *Ozimops cobourgianus* | Northern Coastal Free-tailed Bat | P1 | call recorded | call recorded |
| *Pipistrellus westralis* | Northern Pipistrelle | - | | |

| Scientific name | Common Name | Status | Site C3 | Site C |
|---|---|---|---|---|
| *Saccolaimus flaviventris* | Yellow-bellied Sheath-tailed Bat | - | | call recorded |
| *Scotorepens greyii* | Little Broad-nosed Bat | - | | call recorded |
| *Taphozous georgianus* | Common Sheath-tailed Bat | - | call recorded | |
| *Vespadelus douglasorum* | Yellow-lipped Cave Bat | P2 | likely call | likely call |
| *Macropus agilis* | Agile Wallaby | - | x | |
| *Felis catus* | Cat | Int | x, cam | cam |
| *Pseudomys delicata* | Delicate Mouse | - | cam | |
| *Canus familiaris* | Dog | Int | x | x |
| *Macropus robustus* | Euro | - | x, cam | x |
| *Pteropus scapulatus* | Little Red Flying Fox | - | | x |
| **Reptiles** | | | | |
| *Ctenotus inornatus* | Striped Skink | - | x | x |
| *Gehyra variegata* | Tree Dtella | - | x | x |
| *Strophurus ciliaris* | Northern spiny-tailed gecko | - | x | |
| *Diporiphora bennetti* | Kimberley Sandstone Dragon | - | x | |
| *Heteronotia binoei* | Binoe's gecko | - | x | x |
| *Cryptoblepharus metallicus* | Snake-eyed Skink | - | | x |
| **Amphibians** | | | | |
| *Rhinella marina* | Cane toad | Int | cam | |

## Bat call analyses results – Broome

| Species | Location | | Site F (north) | Site F (north) | Site F (central) | Site F (south) | Site G (north) | Site G (north) | Site F (south) | Site G (south) | Site G (south) | Site H | Site H |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Lat.** | | -17.840133 | -17.840285 | -17.872405 | -17.883613 | -17.901078 | -17.901097 | -17.912147 | -17.923722 | -17.923798 | -17.930003 | -17.932602 |
| | **Long.** | | 122.287608 | 122.287495 | 122.278393 | 122.282038 | 122.292393 | 122.292352 | 122.248468 | 122.29747 | 122.297322 | 122.29654 | 122.303438 |
| | **Common Name** | **Night** | 8/03/24 | 9/03/24 | 10/03/24 | 7/03/24 | 16/02/24 | 17/02/24 | 6/03/24 | 14/02/24 | 15/02/24 | 12/02/24 | 13/02/24 |
| | | **Listing** | | | | | | | | | | | |
| *Chaerephon jobensis, Saccolaimus flaviventris* | Call group (SG) | | 25 | 14 | 13 | 54 | 19 | 17 | 44 | 21 | 20 | 12 | 22 |
| *Chalinolobus gouldii* | Goulds Wattlebat (D) | | | | | | | | | | | 1 | |
| *Chalinolobus gouldii, Ozimops cobourgianus* | Call Group (SG) | | 15 | 2 | | 17 | 50 | 30 | 28 | 39 | 23 | 37 | 8 |
| *Chalinolobus nigrogriseus* | Hoary Wattled Bat (D) | | 6 | 2 | 2 | 12 | 6 | 5 | 20 | 92 | 26 | 10 | 8 |
| *Chalinolobus nigrogriseus, Scotorepens greyii, Scotorepens sanborni* | Call group (SG) | | 20 | 23 | 1 | 19 | 37 | 25 | 16 | 70 | 31 | 25 | 4 |
| *Miniopterus schreibersii oriana, Pipistrellus westralis, Vespadelus douglasorum* | Call group (SG) | | | | | | | 137 | 1 | 43 | 13 | | |
| *Nyctophilus geoffroyi pallescens* | Lesser Long-eared Bat (D) | | 8 | 6 | 1 | 2 | 7 | 10 | 1 | 5 | 4 | 3 | 2 |
| *Ozimops cobourgianus* | Northern Coastal Free-tailed Bat (D) | P1 | 4 | 1 | 1 | 22 | 60 | 41 | 41 | 29 | 23 | 39 | 9 |
| *Ozimops lumsdenae* | Northern Free-tailed Bat (D) | | | | 2 | 3 | 4 | 2 | 2 | 4 | | 3 | 1 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Saccolaimus saccolaimus* | Bare-rumped Sheath-tailed Bat (D) | Vu | | | | 6 | | | | 1 | | | 2 |
| *Scotorepens greyii* | Little Broad-nosed Bat (D) | | 117 | 144 | 25 | 71 | 36 | 18 | 73 | 97 | 57 | 11 | 12 |
| *Vespadelus douglasorum* | Yellow-lipped Cave Bat (D) | P2 | | | | | | 2 | | 30 | 11 | | |

**D –** Definite
**PR –** Probable
**SG –** Species Group

**Bat call analyses results – Derby**

| Species / species group | sm4_6_batA | sm4_6_batA | sm4_6_batA | sm4_6_batA | sm4_6_batA | sm4_6_batB | sm4_6_batB | sm4_6_batB | sm4_7_batA | sm4_7_batA | sm4_7_batA | sm4_7_batA | sm4_7_batA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | 18/03/24 | 19/03/24 | 20/03/24 | 21/03/24 | 22/03/24 | 22/03/24 | 23/03/24 | 24/03/24 | 18/03/24 | 19/03/24 | 20/03/24 | 21/03/24 | 22/03/24 |
| Derby sites | site I | site I | site I & C | site C | site C & O | site O | site O | site O | site P | Site P | site P & D | site D | site D |
| *Chaerephon jobensis* | PR | PR | PR | D | D | D | PR | - | PR | D | D | D | D |
| *Chalinolobus gouldii* | - | D | D | - | - | - | - | - | D | - | D | D | D |
| *Chalinolobus nigrogriseus* | PR | PR | PR | PR | - | PR | PR | - | PR | PR | PR | PR | PR |
| *Miniopterus orianae* | PR | PR | PR | PR | PR | PR | PR | - | PR | PR | PR | PR | PR |
| *Nyctophilus sp.* | - | - | - | D | - | - | | - | | D | - | - | D |
| *Ozimops cobourgianus – P1* | D | D | D | D | - | D | - | - | D | D | D | D | - |
| *Pipistrellus westralis* | D | D | D | D | - | - | D | - | - | - | D | - | - |
| *Saccolaimus flaviventris* | D | PR | D | D | D | PR | PR | - | D | D | D | D | D |
| *Scotorepens greyii* | D | D | D | D | D | D | D | - | D | D | D | D | D |
| *Taphozous georgianus* | | | D | | D | - | - | - | | D | D | D | D |
| *Vespadelus douglasorum* | PR | PR | PR | PR | PR | PR | PR | - | PR | PR | PR | PR | PR |
| *C. gouldii/ O. cobourgianus* | SG | SG | SG | SG | - | SG | - | - | SG | SG | SG | SG | - |
| *C. gouldii/ O. cobourgianus/ S.greyii* | - | SG | SG | - | - | - | - | - | - | - | - | SG | - |
| *C. nigrogriseus/ S. greyii/ S. sanborni* | SG | SG | SG | SG | - | SG | SG | - | SG | SG | SG | SG | SG |
| *P. westralis/ M. orianae* | SG | SG | SG | SG | - | SG | SG | - | SG | SG | SG | SG | SG |
| *S. flaviventris/ C. jobensis* | SG | SG | SG | SG | SG | SG | SG | SG | SG | SG | SG | SG | SG |

**D –** Definite
**PR –** Probable
**SG –** Species Group

**Bat call analyses results – Halls Creek**

| Species / species group | sm4_6_Halls Creek | sm4_6_Halls Creek | sm4_6_Halls Creek | sm4_7_Halls Creek | sm4_7_Halls Creek | sm4_7_Halls Creek |
|---|---|---|---|---|---|---|
| Date | 23/04/24 | 24/04/24 | 25/04/24 | 23/04/24 | 24/04/24 | 25/04/24 |
| Hall's Creek sites | site C | site C | site C | site C3 | site C3 | site C3 |
| *Chaerephon jobensis* | D | PR | PR | PR | PR | PR |
| *Chalinolobus gouldii* | D | D | D | D | - | - |
| *Chalinolobus nigrogriseus* | PR | PR | PR | PR | PR | - |
| *Miniopterus orianae* | PR | PR | PR | PR | PR | - |
| *Nyctophilus sp.* | - | D | - | - | D | - |
| *Ozimops cobourgianus* – P1 | D | D | D | D | D | D |
| *Pipistrellus westralis* | PR | PR | PR | PR | PR | - |
| *Saccolaimus flaviventris* | D | D | D | PR | D | D |
| *Scotorepens greyii* | D | D | D | - | -- | |
| *Taphozous georgianus* | - | - | - | - | D | D |
| *Vespadelus douglasorum* – P2 | PR | PR | - | | PR | |
| *C. gouldii/ O. cobourgianus* | SG | SG | SG | SG | SG | SG |
| *C. gouldii/ O. cobourgianus/ S.greyii* | SG | - | - | - | - | - |
| *C. nigrogriseus/ S. greyii/ S. sanborni* | SG | SG | SG | SG | SG | SG |
| *P. westralis/ M. orianae* | SG | SG | SG | SG | SG | - |
| *S. flaviventris/ C. jobensis* | SG | SG | SG | SG | SG | SG |

**D –** Definite
**PR –** Probable
**SG –** Species Group

**Remote camera results (number of records) – Broome**

| **Broome sites** | | G | | | | H | | | | | F | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Scientific name** | **Common name** | P5 | P5 | W13 | W13 | HF10 | HF10 | W4 | W4 | HF10 | HF10 | P5 | W4 | W13 |
| *Macrotis lagotis* | Bilby | | | | | | | | | | 1 | 4 | | |
| *Trichosurus vulpecula arnhemensis* | Northern Brush-tail Possum | | 2 | | | | | | | | | | | |
| *Rattus* sp. or *Pseudomys nanus* | Rat/mouse | | | | | 1 | | | | | | | 6 | |
| Rodent | mouse | | | | | | | | | | | | | 1 |
| *Macropus agilis* | Agile Wallaby | | 1 | | | | 1 | 1 | | | | | | |
| *Canis familiaris* | Dingo | | | | | | 1 | | | | | | | |
| *Centropus phasianinus* | Pheasant Coucal | | | | | | | | | | | 1 | | |
| *Geopelia placida* | Peaceful Dove | | | | | | | | | | | 1 | | |
| *Dacelo leachii* | Blue-winged Kookaburra | | | | 2 | | | | | | | | | |
| *Grallina cyanoleuca* | Magpie-lark | | | | 1 | | | | | | | | | |
| *Pomatostomus temporalis* | Grey-crowned Babbler | | | | 2 | | | | | | | | | |
| *Chlamydosaurus kingii* | Frilled Lizard | | | | 3 | | | | | | | | | |
| *Tiliqua scincoides intermedia* | Northern Blue-tongued Skink | | | | | | | | | | | 1 | | 1 |
| *Varanus gouldi* | Goulds Monitor | 2 | | | 5 | | | | | | | | | |

**Remote camera results (number of records) – Derby**

| **Derby Sites** | | P | P | D | D | D | C | C | I | I | O |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Common name** | **Scientific name** | Cam 4 | Cam 1 | Cam 115 | Cam G | Cam 13 | Cam 24 | Cam 29 | Cam 77 | Cam 6 | Cam 27 |
| Mud Lark | *Grallina cyanoleuca* | 1 | | | | | | | | | |
| Agile Wallaby | *Notamacropus agilis* | | 6 | 2 | | 1 | 3 | | | 2 | |
| Black-headed Monitor | *Varanus tristis* | | | | | | | | 1 | | |
| Boobook Owl | *Ninox boobook* | | | | | 1 | | | | | |
| Singing Honeyeater | *Gavicalis virescens* | | | | | 1 | | | | | |
| Sacred Kingfisher | *Todiramphus sanctus* | | | | | 1 | | | | | |
| Crested Pigeon | *Ocyphaps lophotes* | | | | | 1 | | | | | |
| Bar-shouldered Dove | *Geopelia humeralis* | | | | | 1 | | | | | |
| Dog | *Canis familiaris* | | | | | | | 3 | | | |
| Northern bar-lipped skink | *Eremiascincus isolepis* | | | | | | | 1 | | | |
| Burton's Legless Lizard | *Lialis burtonis* | | | | | | | 1 | | | |
| Cat | *Felis catus* | | | | | | | 1 | | | |

**Habitat trees for Northern Brushtail Possum – Broome**

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 1 | Habitat tree | boab | 0 | 12/02/2024 | 425399.4 | 8019316.6 |
| 2 | Habitat tree | euc with hollow | 1 | 13/02/2024 | 425424.1 | 8019340.4 |
| 3 | Habitat tree | possum hollow, corymbia | 1 | 13/02/2024 | 425388.6 | 8019446.4 |
| 4 | Habitat tree | possum hollow | 1 | 13/02/2024 | 425371.1 | 8019470.8 |
| 5 | Habitat tree | possum hollow trunk of euc | 1 | 13/02/2024 | 425393.2 | 8019492.8 |
| 6 | Habitat tree | habitat tree, one hollow | 1 | 13/02/2024 | 425374.3 | 8019586.1 |
| 7 | Habitat tree | habitat tree | 0 | 13/02/2024 | 425426.2 | 8020461.0 |
| 8 | Habitat tree | habitat tree | 0 | 13/02/2024 | 425591.9 | 8020553.0 |
| 9 | Habitat tree | habitat tree | 0 | 13/02/2024 | 425588.0 | 8019817.1 |
| 10 | Habitat tree | habitat tree | 0 | 13/02/2024 | 425602.2 | 8019831.1 |
| 11 | Habitat tree | habitat tree | 0 | 13/02/2024 | 425594.3 | 8019661.8 |
| 12 | Habitat tree | habitat tree no hollows | 0 | 13/02/2024 | 425585.1 | 8019610.0 |
| 13 | Habitat tree | habitat tree with hollow | 1 | 13/02/2024 | 425601.0 | 8019446.3 |
| 14 | Habitat tree | large euc no hollows | 0 | 13/02/2024 | 425637.9 | 8019323.7 |
| 15 | Habitat tree | habitat tree with hollow | 1 | 13/02/2024 | 425587.9 | 8019233.9 |
| 16 | Habitat tree | habitat tree with hollows | 1 | 13/02/2024 | 425590.9 | 8018954.1 |
| 17 | Habitat tree | habitat tree with hollow | 1 | 13/02/2024 | 425576.6 | 8018796.2 |
| 18 | Habitat tree | habitat tree with hollow | 1 | 13/02/2024 | 425557.6 | 8018768.8 |
| 19 | Habitat tree | habitat tree with hollow | 1 | 13/02/2024 | 425603.2 | 8018438.1 |
| 20 | Habitat tree | habitat tree with large hollow | 1 | 14/02/2024 | 425578.5 | 8018398.8 |
| 21 | Habitat tree | habitat tree with hollows | 1 | 14/02/2024 | 425559.5 | 8018361.8 |
| 22 | Habitat tree | habitat tree with hollow | 1 | 14/02/2024 | 426355.6 | 8017868.3 |
| 23 | Habitat tree | habitat tree with hollow | 1 | 14/02/2024 | 426386.5 | 8017850.9 |
| 24 | Habitat tree | habitat tree with small hollows | 1 | 14/02/2024 | 426364.8 | 8017714.0 |
| 25 | Habitat tree | large habitat tree no hollows | 0 | 15/02/2024 | 426401.5 | 8017574.6 |
| 26 | Habitat tree | habitat tree no hollows | 0 | 15/02/2024 | 426387.8 | 8017552.8 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 27 | Habitat tree | habitat tree with 2 hollows one with active bee hive | 2 | 15/02/2024 | 426375.1 | 8017495.2 |
| 28 | Habitat tree | large habitat tree no hollows | 0 | 15/02/2024 | 426382.9 | 8017333.0 |
| 29 | Habitat tree | habitat tree with small hollows | 1 | 15/02/2024 | 426376.6 | 8016985.4 |
| 30 | Habitat tree | large habitat tree small hollow | 1 | 15/02/2024 | 426352.8 | 8016899.8 |
| 31 | Habitat tree | habitat tree with med hollow | 1 | 15/02/2024 | 426354.9 | 8016842.0 |
| 32 | Habitat tree | large habitat tree with barking owl no hollows | 0 | 15/02/2024 | 426294.3 | 8016910.0 |
| 33 | Habitat tree | habitat tree no hollow | 0 | 15/02/2024 | 426284.9 | 8016915.0 |
| 34 | Habitat tree | habitat tree with hollows | 1 | 15/02/2024 | 426289.1 | 8016998.3 |
| 35 | Habitat tree | habitat tree with hollows | 1 | 15/02/2024 | 426287.1 | 8017210.7 |
| 36 | Habitat tree | large habitat tree no hollows | 0 | 15/02/2024 | 426280.0 | 8017218.1 |
| 37 | Habitat tree | habitat tree small hollow | 1 | 15/02/2024 | 426304.3 | 8017364.6 |
| 38 | Habitat tree | habitat tree small hollow | 1 | 15/02/2024 | 426298.9 | 8017435.6 |
| 39 | Habitat tree | large habitat tree with good hollows | 1 | 15/02/2024 | 426325.7 | 8017551.1 |
| 40 | Habitat tree | large habitat tree possible hollows | 1 | 15/02/2024 | 426329.0 | 8017564.0 |
| 41 | Habitat tree | habitat tree with hollow | 1 | 15/02/2024 | 426315.3 | 8017704.8 |
| 42 | Habitat tree | habitat tree possible small hollow | 1 | 15/02/2024 | 426301.0 | 8017793.4 |
| 43 | Habitat tree | habitat tree no hollows | 0 | 15/02/2024 | 426293.0 | 8017804.0 |
| 44 | Habitat tree | habitat tree, large hollow with barn owl fly out of tree | 1 | 15/02/2024 | 426287.7 | 8017796.4 |
| 45 | Habitat tree | euc small hollow | 1 | 15/02/2024 | 426304.7 | 8017896.3 |
| 46 | Habitat tree | euc small hollow | 1 | 15/02/2024 | 425825.3 | 8018555.1 |
| 47 | Habitat tree | habitat tree no hollows | 0 | 15/02/2024 | 425833.7 | 8019110.1 |
| 48 | Habitat tree | habitat tree with small hollows | 1 | 15/02/2024 | 425827.4 | 8019497.3 |
| 49 | Habitat tree | habitat tree small hollow | 1 | 15/02/2024 | 425854.6 | 8019704.4 |
| 50 | Habitat tree | habitat tree potentially hollows | 1 | 15/02/2024 | 425838.1 | 8020688.1 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 51 | Habitat tree | habitat with poss small hollow | 1 | 15/02/2024 | 425727.1 | 8019080.2 |
| 52 | Habitat tree | habitat tree with small hollows | 1 | 15/02/2024 | 425766.1 | 8018880.4 |
| 53 | Habitat tree | habitat tree small hollow | 1 | 15/02/2024 | 425766.2 | 8018755.3 |
| 54 | Habitat tree | habitat tree with hollow | 1 | 15/02/2024 | 425774.5 | 8018746.9 |
| 55 | Habitat tree | habitat tree small hollow | 1 | 15/02/2024 | 425728.2 | 8018696.3 |
| 56 | Habitat tree | habitat tree with hollows | 1 | 15/02/2024 | 425734.9 | 8018689.8 |
| 57 | Habitat tree | habitat tree with hollows | 1 | 15/02/2024 | 425761.6 | 8018678.3 |
| 58 | Habitat tree | habitat tree with hollows | 1 | 15/02/2024 | 425775.1 | 8018328.7 |
| 59 | Habitat tree | stag with hollows | 1 | 15/02/2024 | 425003.8 | 8020365.4 |
| 60 | Habitat tree | habitat tree with hollows | 1 | 15/02/2024 | 425029.9 | 8020057.1 |
| 61 | Habitat tree | large brachychiton habitat tree | 0 | 15/02/2024 | 425032.1 | 8020049.6 |
| 62 | Habitat tree | large whitegum, possibly hollows | 1 | 15/02/2024 | 425040.1 | 8020041.2 |
| 63 | Habitat tree | habitat tree with small hollow | 1 | 15/02/2024 | 425011.2 | 8019988.8 |
| 64 | Habitat tree | euc small hollows | 1 | 15/02/2024 | 425002.7 | 8019929.6 |
| 65 | Habitat tree | euc with hollow | 1 | 15/02/2024 | 425006.7 | 8019911.8 |
| 66 | Habitat tree | large euc habitat tree no hollows | 0 | 15/02/2024 | 425019.4 | 8019338.9 |
| 67 | Habitat tree | habitat tree with hollows | 1 | 15/02/2024 | 425056.8 | 8019221.7 |
| 68 | Habitat tree | large euc habitat no hollows | 0 | 15/02/2024 | 425060.2 | 8018824.1 |
| 69 | Habitat tree | habitat tree with hollow | 1 | 15/02/2024 | 425046.3 | 8018819.7 |
| 70 | Habitat tree | large euc habitat no hollows | 0 | 15/02/2024 | 425069.5 | 8018784.2 |
| 71 | Habitat tree | large euc habitat tree no hollows | 0 | 15/02/2024 | 425211.8 | 8018628.4 |
| 72 | Habitat tree | large euc habitat tree with large hollow 12 cm at 4m, native bees preset | 1 | 13/02/2024 | 425196.9 | 8018635.9 |
| 73 | Habitat tree | large euc habitat tree with large hollow 12 cm at 4m, native bees preset | 1 | 13/02/2024 | 425210.4 | 8018674.7 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 74 | Habitat tree | large euc habitat tree with 2x large hollow 12 and 15 cm at 4m, possum scat present | 2 | 13/02/2024 | 425200.3 | 8018686.8 |
| 75 | Habitat tree | large euc habitat tree with medium hollow 10 cm at 3m | 1 | 13/02/2024 | 425243.0 | 8018834.8 |
| 76 | Habitat tree | large euc habitat tree with medium hollow 10 cm at 3m | 1 | 13/02/2024 | 425228.5 | 8018985.8 |
| 77 | Habitat tree | large euc habitat tree with large hollow 12 cm at 4m, preset | 1 | 13/02/2024 | 425207.2 | 8019221.4 |
| 78 | Habitat tree | large euc habitat tree with large hollow 10 cm at 3m preset | 1 | 13/02/2024 | 425203.0 | 8019401.7 |
| 79 | Habitat tree | large euc habitat tree with small hollow 7 cm at 4m preset | 1 | 13/02/2024 | 425210.3 | 8019604.0 |
| 80 | Habitat tree | large euc habitat tree with small hollow 7 cm at 4m preset | 1 | 13/02/2024 | 425212.4 | 8019633.8 |
| 81 | Habitat tree | large euc habitat tree with small hollow 7 cm at 4m preset | 1 | 13/02/2024 | 425192.9 | 8019752.5 |
| 82 | Habitat tree | large euc habitat tree with medium size hollow 10 cm at 4m preset | 1 | 13/02/2024 | 425225.7 | 8019814.3 |
| 83 | Habitat tree | large euc habitat tree with large size hollow 15 cm at 3m preset | 1 | 13/02/2024 | 425211.8 | 8020064.5 |
| 84 | Habitat tree | large euc habitat tree with medium hollow 9 cm at 3m, preset | 1 | 13/02/2024 | 425217.1 | 8020156.1 |
| 85 | Habitat tree | large euc habitat tree with large hollow 15 cm at 3m, preset | 1 | 13/02/2024 | 425219.4 | 8020165.6 |
| 86 | Habitat tree | large euc habitat tree with large hollow 10 cm at 3m, present | 1 | 13/02/2024 | 425210.4 | 8020275.8 |
| 87 | Habitat tree | large euc habitat tree with large hollow 15 cm at 3m, preset | 1 | 13/02/2024 | 425244.3 | 8019861.2 |
| 88 | Habitat tree | large euc habitat tree with small hollow 6 cm at 3m, preset | 1 | 13/02/2024 | 425248.0 | 8019663.9 |
| 89 | Habitat tree | large euc habitat tree with large hollow 13 cm at 3m, preset | 1 | 13/02/2024 | 425254.9 | 8019465.8 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 90 | Habitat tree | large euc habitat tree with small hollow 6cm at 3m, preset | 1 | 13/02/2024 | 425251.2 | 8019451.6 |
| 91 | Habitat tree | large euc habitat tree with numerous small and medium hollow 6 to 10cm at 3m, preset | 1 | 13/02/2024 | 425272.1 | 8019335.7 |
| 92 | Habitat tree | large euc habitat tree with n small and medium hollow 6 to 10cm at 3m, preset | 1 | 13/02/2024 | 425245.6 | 8018836.7 |
| 93 | Habitat tree | large euc habitat tree with large hollow 16 to 10cm at 3m, preset | 1 | 13/02/2024 | 425255.8 | 8018539.5 |
| 94 | Habitat tree | large habitat tree euc | 0 | 13/02/2024 | 425244.6 | 8018193.2 |
| 95 | Habitat tree | large euc habitat tree with large hollow 12 to 10cm at 3m, preset | 1 | 13/02/2024 | 425331.3 | 8017641.9 |
| 96 | Habitat tree | large euc habitat tree with large hollow 15cm at 2m, preset | 1 | 13/02/2024 | 426071.4 | 8017165.0 |
| 97 | Habitat tree | large euc habitat tree with small hollow 5cm at 2m, preset | 1 | 13/02/2024 | 426102.3 | 8017162.4 |
| 98 | Habitat tree | large euc habitat tree with preset | 1 | 13/02/2024 | 426181.4 | 8017177.2 |
| 99 | Habitat tree | large euc habitat tree with small hollow 6 cm at 3m preset | 1 | 13/02/2024 | 425480.7 | 8018260.9 |
| 100 | Habitat tree | large euc habitat tree with large hollow 10cm at 2m preset | 1 | 13/02/2024 | 425469.5 | 8018440.4 |
| 101 | Habitat tree | large euc habitat tree with large hollow 10cm at 4m preset | 1 | 13/02/2024 | 425466.1 | 8018499.1 |
| 102 | Habitat tree | large euc habitat tree with several large hollows all around 15cm at 3 to 4m preset | 1 | 13/02/2024 | 425464.5 | 8018538.6 |
| 103 | Habitat tree | large euc habitat tree preset | 0 | 13/02/2024 | 425455.8 | 8018581.3 |
| 104 | Habitat tree | large euc habitat tree with numerous hollows from 10 to 15 cm at 3 to 4 m preset | 1 | 13/02/2024 | 425480.8 | 8018598.3 |
| 105 | Habitat tree | large euc habitat tree | 0 | 13/02/2024 | 425463.0 | 8018657.3 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 106 | Habitat tree | large euc habitat tree with large trunk hollow 18 cm at 1.5 m nothing inside | 1 | 14/02/2024 | 425460.9 | 8018680.2 |
| 107 | Habitat tree | large euc habitat tree with hollow from 10 cm at 3 m preset | 1 | 13/02/2024 | 425469.8 | 8018874.7 |
| 108 | Habitat tree | large euc habitat tree with possible hollow from 10 cm at 3.5 m preset | 1 | 14/02/2024 | 425455.5 | 8018922.0 |
| 109 | Habitat tree | large euc habitat tree with preset | 1 | 14/02/2024 | 425465.6 | 8019346.0 |
| 110 | Habitat tree | large euc habitat tree with preset | 1 | 14/02/2024 | 425468.4 | 8019439.4 |
| 111 | Habitat tree | large euc habitat tree with 2x medium hollow at 8 to 10 cm at 4m preset | 1 | 14/02/2024 | 425468.9 | 8019486.1 |
| 112 | Habitat tree | large euc habitat tree with 1x large hollow at  12 cm at 3m preset | 1 | 14/02/2024 | 425500.7 | 8019563.6 |
| 113 | Habitat tree | habitat tree euc 1 small 6 cm hollow at 3 m | 1 | 14/02/2024 | 425433.3 | 8019598.9 |
| 114 | Habitat tree | large euc habitat tree with medium hollow from 10 cm at 3.5 m preset | 1 | 14/02/2024 | 425457.1 | 8019685.5 |
| 115 | Habitat tree | large euc habitat tree with medium hollow from 10 cm at 3.5 m preset | 1 | 14/02/2024 | 425466.5 | 8019729.2 |
| 116 | Habitat tree | large euc habitat tree with medium hollow from 8 cm at 3.5 m preset | 1 | 14/02/2024 | 425494.6 | 8019779.6 |
| 117 | Habitat tree | large euc habitat tree with possible hollows but hardto see | 1 | 14/02/2024 | 425554.4 | 8020358.4 |
| 118 | Habitat tree | large euc habitat tree with possible hollows but hardto see | 1 | 14/02/2024 | 425527.0 | 8019657.6 |
| 119 | Habitat tree | large euc habitat tree with 2x trees | 0 | 13/02/2024 | 425541.3 | 8019560.0 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 120 | Habitat tree | large euc habitat tree with 3x trees around | 0 | 13/02/2024 | 425523.7 | 8019503.8 |
| 121 | Habitat tree | euc habitat tree hollow 20 cm at 3m | 1 | 14/02/2024 | 425535.3 | 8018933.1 |
| 122 | Habitat tree | euc habitat tree hollow 8 cm at 3m | 1 | 14/02/2024 | 425528.6 | 8018862.1 |
| 123 | Habitat tree | euc habitat tree | 0 | 14/02/2024 | 425536.0 | 8018805.7 |
| 124 | Habitat tree | euc habitat tree 2x hollow 10 and 20 cm at 4 m | 2 | 14/02/2024 | 425516.7 | 8018752.7 |
| 125 | Habitat tree | euc habitat tree hollow 7 cm at 4m | 1 | 14/02/2024 | 425521.0 | 8018549.5 |
| 126 | Habitat tree | euc habitat tree hollow 10 cm at 2.5m | 1 | 15/02/2024 | 425510.6 | 8018184.9 |
| 127 | Habitat tree | euc habitat tree hollow 8 cm at 3m | 1 | 15/02/2024 | 426417.0 | 8017841.7 |
| 128 | Habitat tree | euc habitat tree hollow 6 to8 cm at 3m | 1 | 15/02/2024 | 426439.7 | 8017733.7 |
| 129 | Habitat tree | euc habitat tree hollow 6 cm at 3m | 1 | 15/02/2024 | 426451.5 | 8017714.3 |
| 130 | Habitat tree | euc habitat tree hollow 6 cm and 10cm at 1.5m | 1 | 15/02/2024 | 426472.6 | 8017678.1 |
| 131 | Habitat tree | euc habitat tree hollow 10cm at 3m | 1 | 15/02/2024 | 426452.4 | 8017638.7 |
| 132 | Habitat tree | euc habitat tree hollow 12cm at 3m | | 15/02/2024 | 426450.5 | 8017604.2 |
| 133 | Habitat tree | euc habitat tree hollow 8cm at 2.5m | 1 | 15/02/2024 | 426422.4 | 8017539.8 |
| 134 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 426438.6 | 8017516.0 |
| 135 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 426446.5 | 8017535.2 |
| 136 | Habitat tree | euc habitat tree 2x hollow at 6 and 8 cm at 3m | 1 | 15/02/2024 | 426457.5 | 8017526.0 |
| 137 | Habitat tree | euc habitat tree numerous hollow at 6 and 8 cm at 4m | 1 | 15/02/2024 | 426470.7 | 8017513.5 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 138 | Habitat tree | euc habitat tree numerous hollow at 10 cm at 3m | 1 | 15/02/2024 | 426468.7 | 8017481.3 |
| 139 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 426446.3 | 8017414.9 |
| 140 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 426485.1 | 8017343.1 |
| 141 | Habitat tree | euc habitat tree hollow 12cm at 4.5m | 1 | 15/02/2024 | 426458.8 | 8017304.7 |
| 142 | Habitat tree | huge euc habitat tree numerous hollows 8 to 12cm at 4.5 to 5m | 1 | 15/02/2024 | 426409.5 | 8016941.7 |
| 143 | Habitat tree | euc habitat tree hollow8cm at 3m | 1 | 15/02/2024 | 426353.5 | 8016828.3 |
| 144 | Habitat tree | 5x euc habitat tree some with hollows small one 6 to 8 cm | 1 | 15/02/2024 | 426315.6 | 8016829.7 |
| 145 | Habitat tree | euc habitat tree numerous hollow 6 to 10 cm at 3 to 4 m but hard to see most | 1 | 15/02/2024 | 426302.3 | 8016840.0 |
| 146 | Habitat tree | euc habitat | 0 | 15/02/2024 | 426237.4 | 8016887.6 |
| 147 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 426254.5 | 8016935.2 |
| 148 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 426300.8 | 8017190.6 |
| 149 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 426248.0 | 8017186.3 |
| 150 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 426250.8 | 8017211.0 |
| 151 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 426249.6 | 8017249.0 |
| 152 | Habitat tree | euc habitat tree hollow 12cm at 2 m 2x owners present | 1 | 15/02/2024 | 426248.1 | 8017326.3 |
| 153 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 426233.1 | 8017409.5 |
| 154 | Habitat tree | euc habitat tree hollow 12cm at 4m | 1 | 15/02/2024 | 426230.8 | 8017453.3 |
| 155 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 426260.4 | 8017556.7 |
| 156 | Habitat tree | 2x euc habitat tree | 0 | 15/02/2024 | 426266.5 | 8017605.0 |
| 157 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 426279.2 | 8017927.5 |
| 158 | Habitat tree | 2x euc habitat tree | 0 | 15/02/2024 | 426115.1 | 8018031.7 |
| 159 | Habitat tree | 2x euc habitat tree | 0 | 15/02/2024 | 426130.7 | 8017382.8 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 160 | Habitat tree | 2x euc habitat tree | 0 | 15/02/2024 | 426103.0 | 8017199.3 |
| 161 | Habitat tree | euc habitat tree hollow 12cm at 2m | 1 | 15/02/2024 | 426106.0 | 8017166.8 |
| 162 | Habitat tree | euc habitat tree hollow 10cm at 2m | 1 | 15/02/2024 | 426111.3 | 8016863.5 |
| 163 | Habitat tree | euc habitat tree hollow 15cm at 4m | 1 | 15/02/2024 | 426078.4 | 8016883.9 |
| 164 | Habitat tree | euc habitat tree hollow 12cm at 4m 2x | 1 | 15/02/2024 | 426072.4 | 8016980.7 |
| 165 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 426079.8 | 8017033.6 |
| 166 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 426073.7 | 8017039.6 |
| 167 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 426068.5 | 8017043.8 |
| 168 | Habitat tree | euc habitat tree  hollow 8 cm at 2.5m | 1 | 15/02/2024 | 426054.2 | 8017126.0 |
| 169 | Habitat tree | euc habitat tree  hollow 8 cm at 2.5m | 1 | 15/02/2024 | 426072.4 | 8017280.7 |
| 170 | Habitat tree | euc habitat tree  hollow 8 cm at 2.5m | 1 | 15/02/2024 | 426074.9 | 8017411.0 |
| 171 | Habitat tree | euc habitat tree  hollow2x 10 cm at 2.5m | 1 | 15/02/2024 | 426070.4 | 8017843.1 |
| 172 | Habitat tree | euc habitat tree  big nest present | 0 | 15/02/2024 | 426068.9 | 8017888.7 |
| 173 | Habitat tree | euc habitat tree  4x small hollows present around 6 cm at 3m | 1 | 15/02/2024 | 426066.3 | 8018047.7 |
| 174 | Habitat tree | habitat brchy | 0 | 15/02/2024 | 425899.9 | 8017884.2 |
| 175 | Habitat tree | euc habitat tree hollow 10cm at 4m | 1 | 15/02/2024 | 425861.8 | 8017703.8 |
| 176 | Habitat tree | habitat brchy | 0 | 15/02/2024 | 425860.7 | 8017698.2 |
| 177 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 425849.8 | 8017491.0 |
| 178 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 425839.5 | 8017484.0 |
| 179 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 425847.1 | 8017431.8 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 180 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 425878.0 | 8017390.3 |
| 181 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 425862.9 | 8017387.5 |
| 182 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 425898.9 | 8017267.6 |
| 183 | Habitat tree | euc habitat tree hollow 12cm at 3m | 1 | 15/02/2024 | 425890.1 | 8017252.5 |
| 184 | Habitat tree | habitat tree with hollow | 1 | 15/02/2024 | 425872.6 | 8017182.1 |
| 185 | Habitat tree | euc habitat tree with hollow | 1 | 15/02/2024 | 425888.3 | 8017142.4 |
| 186 | Habitat tree | large euc no hollows | 0 | 15/02/2024 | 425860.5 | 8017096.3 |
| 187 | Habitat tree | euc habitat tree with small hollows | 1 | 15/02/2024 | 425884.8 | 8017000.7 |
| 188 | Habitat tree | euc habitat tree with hollows | 1 | 16/02/2024 | 425885.4 | 8016972.6 |
| 189 | Habitat tree | euc habitat tree with hollow | 1 | 16/02/2024 | 425895.3 | 8016935.1 |
| 190 | Habitat tree | euc habitat small hollow | 1 | 16/02/2024 | 425888.3 | 8016867.7 |
| 191 | Habitat tree | habitat tree with hollow | 1 | 16/02/2024 | 425808.0 | 8016972.3 |
| 192 | Habitat tree | dead trees with hollows | 1 | 16/02/2024 | 425807.9 | 8017011.9 |
| 193 | Habitat tree | dead tree with small hollows | 1 | 16/02/2024 | 425798.6 | 8017029.6 |
| 194 | Habitat tree | habitat tree with hollow | 1 | 16/02/2024 | 425795.9 | 8017043.9 |
| 195 | Habitat tree | stag with hollow | 1 | 16/02/2024 | 425821.9 | 8017045.7 |
| 196 | Habitat tree | euc with hollow | 1 | 16/02/2024 | 425844.3 | 8017056.7 |
| 197 | Habitat tree | euc small hollow | 1 | 16/02/2024 | 425848.8 | 8017053.1 |
| 198 | Habitat tree | euc small hollow | 1 | 16/02/2024 | 425849.6 | 8017050.2 |
| 199 | Habitat tree | habitat tree no hollows | 0 | 16/02/2024 | 425815.8 | 8017148.8 |
| 200 | Habitat tree | large brachychiton | 0 | 16/02/2024 | 425803.6 | 8017209.8 |
| 201 | Habitat tree | habitat tree | 0 | 16/02/2024 | 425826.0 | 8017201.7 |
| 202 | Habitat tree | habitat tree with small hollow | 1 | 16/02/2024 | 425807.9 | 8017314.2 |
| 203 | Habitat tree | habitat tree with hollow | 1 | 16/02/2024 | 425826.3 | 8017391.4 |
| 204 | Habitat tree | habitat tree with hollow | 1 | 16/02/2024 | 425826.2 | 8017814.6 |
| 205 | Habitat tree | habitat tree with small hollow | 1 | 16/02/2024 | 425618.3 | 8018025.6 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 206 | Habitat tree | habitat tree with hollows | 1 | 16/02/2024 | 425606.5 | 8017420.3 |
| 207 | Habitat tree | euc small hollows | 1 | 16/02/2024 | 425623.7 | 8017404.7 |
| 208 | Habitat tree | large euc habitat tree possibly hollows | 1 | 16/02/2024 | 425626.8 | 8017099.0 |
| 209 | Habitat tree | habitat tree with hollow | 1 | 16/02/2024 | 425651.2 | 8017024.9 |
| 210 | Habitat tree | habitat tree with hollow | 1 | 16/02/2024 | 425618.8 | 8016965.6 |
| 211 | Habitat tree | habitat tree with small hollows | 1 | 16/02/2024 | 425628.8 | 8016953.9 |
| 212 | Habitat tree | large habitat tree with hollows | 1 | 16/02/2024 | 425563.9 | 8017149.7 |
| 213 | Habitat tree | euc with hollows | 1 | 16/02/2024 | 425570.2 | 8017215.5 |
| 214 | Habitat tree | habitat tree with hollow | 1 | 16/02/2024 | 425575.2 | 8017645.2 |
| 215 | Habitat tree | large brachy tree | 0 | 16/02/2024 | 425590.2 | 8017888.4 |
| 216 | Habitat tree | habitat tree small hollow | 1 | 16/02/2024 | 425591.1 | 8017937.0 |
| 217 | Habitat tree | euc with hollow | 1 | 16/02/2024 | 425574.9 | 8018020.2 |
| 218 | Habitat tree | euc with hollows | 1 | 16/02/2024 | 426476.9 | 8017129.6 |
| 219 | Habitat tree | habitat tree with hollow | 1 | 16/02/2024 | 426231.2 | 8018020.6 |
| 220 | Habitat tree | boab | 0 | 16/02/2024 | 426137.5 | 8018032.6 |
| 221 | Habitat tree | habitat tree with hollows | 1 | 16/02/2024 | 426086.2 | 8018063.1 |
| 222 | Habitat tree | habitat tree with small hollows | 1 | 16/02/2024 | 426076.3 | 8018062.3 |
| 223 | Habitat tree | habitat tree with hollows | 1 | 16/02/2024 | 425986.5 | 8018067.3 |
| 224 | Habitat tree | habitat tree with small hollow | 1 | 16/02/2024 | 426176.0 | 8017772.0 |
| 225 | Habitat tree | habitat tree with large hollow | 1 | 16/02/2024 | 426188.0 | 8017528.0 |
| 226 | Habitat tree | habitat tree with hollows | 1 | 16/02/2024 | 426190.7 | 8017447.6 |
| 227 | Habitat tree | habitat tree with hollow | 1 | 16/02/2024 | 426180.2 | 8017406.6 |
| 228 | Habitat tree | habitat tree with hollows | 1 | 16/02/2024 | 426182.6 | 8017333.2 |
| 229 | Habitat tree | habitat tree with hollow | 1 | 16/02/2024 | 426175.8 | 8017312.2 |
| 230 | Habitat tree | habitat tree with large hollow | 1 | 16/02/2024 | 426170.0 | 8017274.1 |
| 231 | Habitat tree | habitat tree with hollow | 1 | 16/02/2024 | 426173.6 | 8017250.3 |
| 232 | Habitat tree | habitat tree small hollow | 1 | 16/02/2024 | 426173.4 | 8017226.7 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 233 | Habitat tree | habitat tree with hollows | 1 | 16/02/2024 | 426163.3 | 8017138.2 |
| 234 | Habitat tree | stag with hollows | 1 | 16/02/2024 | 426182.2 | 8017048.9 |
| 235 | Habitat tree | habitat tree with hollow | 1 | 16/02/2024 | 426169.4 | 8017024.3 |
| 236 | Habitat tree | habitat tree with hollows | 1 | 16/02/2024 | 426164.7 | 8016965.1 |
| 237 | Habitat tree | stag with hollows | 1 | 16/02/2024 | 426164.5 | 8016939.6 |
| 238 | Habitat tree | habitat tree with hollow | 1 | 17/02/2024 | 426172.0 | 8016912.8 |
| 239 | Habitat tree | habitat tree with hollow | 1 | 17/02/2024 | 426180.7 | 8016871.7 |
| 240 | Habitat tree | habitat tree with hollow | 1 | 17/02/2024 | 426184.7 | 8016880.1 |
| 241 | Habitat tree | habitat tree small hollow | 1 | 17/02/2024 | 426173.1 | 8016823.5 |
| 242 | Habitat tree | habitat tree with hollows | 1 | 17/02/2024 | 426165.4 | 8016823.6 |
| 243 | Habitat tree | large brachy | 0 | 17/02/2024 | 426126.0 | 8016820.1 |
| 244 | Habitat tree | large euc no hollows | 0 | 17/02/2024 | 426081.9 | 8016825.3 |
| 245 | Habitat tree | habitat tree small hollow | 1 | 17/02/2024 | 426015.7 | 8016818.3 |
| 246 | Habitat tree | euc habitat small hollows | 1 | 17/02/2024 | 426001.7 | 8016873.4 |
| 247 | Habitat tree | very large euc habitat tree | 0 | 17/02/2024 | 426000.2 | 8017041.1 |
| 248 | Habitat tree | big brachy | 0 | 17/02/2024 | 425961.2 | 8017059.3 |
| 249 | Habitat tree | euc habitat tree no hollows | 0 | 17/02/2024 | 425988.0 | 8017108.4 |
| 250 | Habitat tree | euc habitat tree with large hollow 12cm at 3m | 1 | 15/02/2024 | 425986.1 | 8017163.3 |
| 251 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 426000.3 | 8017193.7 |
| 252 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 425989.8 | 8017234.8 |
| 253 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 425977.4 | 8017658.5 |
| 254 | Habitat tree | euc habitat tree large hollow 15cm at 2 meters looks used | 1 | 15/02/2024 | 426033.0 | 8017708.6 |
| 255 | Habitat tree | euc habitat tree large hollow 5cm at 2 meters HAS BEES | 1 | 15/02/2024 | 426088.6 | 8017814.6 |
| 256 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 426060.2 | 8017860.1 |
| 257 | Habitat tree | euc habitat tree 2x hollow 6 and 8 at 3m | 1 | 15/02/2024 | 426033.3 | 8017952.2 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 258 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 425928.6 | 8018007.9 |
| 259 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 425941.2 | 8018000.1 |
| 260 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 425965.8 | 8017954.6 |
| 261 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 425934.7 | 8017927.0 |
| 262 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 425913.0 | 8017921.8 |
| 263 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 425962.5 | 8017815.0 |
| 264 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 425944.0 | 8017165.3 |
| 265 | Habitat tree | euc habitat tree | 0 | 15/02/2024 | 425944.1 | 8017131.8 |
| 266 | Habitat tree | euc habitat tree large hollow 20 cm at 2.5 see pic | 1 | 16/02/2024 | 425931.5 | 8017128.6 |
| 267 | Habitat tree | euc habitat tree large hollow 20 cm at 2.0 m | 1 | 16/02/2024 | 425916.0 | 8017112.5 |
| 268 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425928.1 | 8017076.7 |
| 269 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425928.8 | 8017062.1 |
| 270 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425933.4 | 8017044.5 |
| 271 | Habitat tree | euc habitat tree 2x 20cm at 2m 10cm at 3m | 1 | 16/02/2024 | 425936.3 | 8017013.9 |
| 272 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425928.3 | 8017011.5 |
| 273 | Habitat tree | euc habitat  tree  15 cm at 2m | 1 | 16/02/2024 | 425923.5 | 8016990.1 |
| 274 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425917.2 | 8016943.8 |
| 275 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425913.8 | 8016938.5 |
| 276 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425916.8 | 8016903.4 |
| 277 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425914.4 | 8016868.8 |
| 278 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425831.6 | 8016823.1 |
| 279 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425739.1 | 8016838.1 |
| 280 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425733.2 | 8016858.3 |
| 281 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425767.1 | 8016984.7 |
| 282 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425771.7 | 8016993.1 |
| 283 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425777.3 | 8017000.0 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 284 | Habitat tree | 2x euc habitat tree | 0 | 16/02/2024 | 425772.4 | 8017015.0 |
| 285 | Habitat tree | large habitat brachy tree | 0 | 16/02/2024 | 425777.8 | 8017037.8 |
| 286 | Habitat tree | large habitat brachy tree hollow 10cm at 4m | 1 | 16/02/2024 | 425759.3 | 8017079.7 |
| 287 | Habitat tree | large habitat e tree hollow 8cm at 3m | 1 | 16/02/2024 | 425766.8 | 8017115.2 |
| 288 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425750.9 | 8017182.2 |
| 289 | Habitat tree | euc habitat tree large hollow 20cm at 4.5 m has wear onrim gg pic | 1 | 16/02/2024 | 425729.4 | 8017221.7 |
| 290 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425729.4 | 8017221.7 |
| 291 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425722.9 | 8017246.3 |
| 292 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425736.6 | 8017261.6 |
| 293 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425747.3 | 8017317.2 |
| 294 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425760.9 | 8017322.0 |
| 295 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425770.4 | 8017330.8 |
| 296 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425758.8 | 8017332.5 |
| 297 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425746.5 | 8017374.8 |
| 298 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425761.0 | 8017389.0 |
| 299 | Habitat tree | euc habitat tree hollow 10cm at 2m. 5 | 1 | 16/02/2024 | 425746.9 | 8017432.6 |
| 300 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425748.0 | 8017441.5 |
| 301 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425760.7 | 8017447.8 |
| 302 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425756.1 | 8017568.5 |
| 303 | Habitat tree | euc habitat tree 10cm at 4m with trusts in hollow | 1 | 16/02/2024 | 425743.9 | 8017634.5 |
| 304 | Habitat tree | euc habitat tree 10cm a2m | 1 | 16/02/2024 | 425763.0 | 8017655.3 |
| 305 | Habitat tree | euc habitat tree 10cm a2m | 1 | 16/02/2024 | 425755.2 | 8017741.0 |
| 306 | Habitat tree | euc habitat tree 10cm a2m | 1 | 16/02/2024 | 425720.0 | 8017810.0 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 307 | Habitat tree | euc habitat tree stump 20cm at 2m | 1 | 16/02/2024 | 425812.2 | 8017798.4 |
| 308 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425767.8 | 8017854.7 |
| 309 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425765.4 | 8017891.0 |
| 310 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425780.2 | 8017900.7 |
| 311 | Habitat tree | euc habitat tree 6cm at 4m | 1 | 16/02/2024 | 425788.5 | 8017908.1 |
| 312 | Habitat tree | euc habitat tree 6cm at 4m | 1 | 16/02/2024 | 425776.1 | 8017961.2 |
| 313 | Habitat tree | euc habitat tree 2x hollow 6cm and 12cm at 2.5 m and 3m, large hollow has side where being used | 2 | 16/02/2024 | 425775.8 | 8017981.6 |
| 314 | Habitat tree | habitat tree | 0 | 16/02/2024 | 425753.9 | 8018055.1 |
| 315 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425770.6 | 8018107.5 |
| 316 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425708.9 | 8018044.1 |
| 317 | Habitat tree | euc habitat tree hollow 8cm at 3m | 1 | 16/02/2024 | 425689.2 | 8018005.9 |
| 318 | Habitat tree | euc habitat tree hollow 14cm at 3m ,great hollow entrance wear marks | 1 | 16/02/2024 | 425687.0 | 8017965.8 |
| 319 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425681.0 | 8017939.1 |
| 320 | Habitat tree | euc habitat tree 2x small 6cm hollow at 2.5 | 1 | 16/02/2024 | 425681.5 | 8017900.6 |
| 321 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425687.0 | 8017833.1 |
| 322 | Habitat tree | euc habitat tree large trunk hollow 20cm at 2 m | 1 | 16/02/2024 | 425697.0 | 8017830.9 |
| 323 | Habitat tree | euc habitat tree large trunk hollow slit | 1 | 16/02/2024 | 425677.5 | 8017806.8 |
| 324 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425669.2 | 8017789.5 |
| 325 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425669.6 | 8017257.5 |
| 326 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425630.1 | 8017098.6 |
| 327 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425650.7 | 8017024.5 |
| 328 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425670.9 | 8017010.7 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 329 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425644.2 | 8016968.4 |
| 330 | Habitat tree | euc habitat tree numerous small hollow 6cm at 2m | 1 | 16/02/2024 | 425664.3 | 8016919.4 |
| 331 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425652.7 | 8016914.9 |
| 332 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425658.4 | 8016889.1 |
| 333 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425502.5 | 8016966.4 |
| 334 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425503.5 | 8017007.1 |
| 335 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425510.1 | 8017040.0 |
| 336 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425506.3 | 8017103.4 |
| 337 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425506.0 | 8017138.4 |
| 338 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425501.4 | 8017191.1 |
| 339 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425527.3 | 8017446.3 |
| 340 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425521.6 | 8017476.6 |
| 341 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425493.7 | 8017649.6 |
| 342 | Habitat tree | euc habitat tree large hollow 20cm at 3m | 1 | 16/02/2024 | 425507.6 | 8017750.6 |
| 343 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425514.0 | 8017789.1 |
| 344 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425517.1 | 8017818.7 |
| 345 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425520.1 | 8017832.1 |
| 346 | Habitat tree | euc habitat tree small hollow 6cm at 3m | 1 | 16/02/2024 | 425505.4 | 8017850.3 |
| 347 | Habitat tree | euc habitat tree large hollow 16cm at 3m | 1 | 16/02/2024 | 425539.1 | 8018033.4 |
| 348 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425512.6 | 8018064.4 |
| 349 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 426489.9 | 8017895.7 |
| 350 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 426535.6 | 8017885.7 |
| 351 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 426521.0 | 8017848.9 |
| 352 | Habitat tree | euc habitat tree hollow 12cm at 4m | 1 | 16/02/2024 | 426521.4 | 8017820.5 |
| 353 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 426536.3 | 8017801.2 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 354 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 426524.3 | 8017586.4 |
| 355 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 426518.2 | 8017557.5 |
| 356 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 426519.9 | 8017522.7 |
| 357 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 426519.1 | 8017482.0 |
| 358 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 426537.1 | 8017466.5 |
| 359 | Habitat tree | euc habitat tree 2x | 0 | 17/02/2024 | 426522.8 | 8017384.2 |
| 360 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 426525.0 | 8017350.3 |
| 361 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 426512.8 | 8017305.7 |
| 362 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 426502.8 | 8017119.5 |
| 363 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 426526.5 | 8017095.8 |
| 364 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 426517.0 | 8016933.5 |
| 365 | Habitat tree | euc habitat tree | 0 | 14/02/2024 | 426524.5 | 8016865.5 |
| 366 | Habitat tree | euc habitat tree | 0 | 14/02/2024 | 426507.1 | 8016838.6 |
| 367 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 426476.9 | 8017980.6 |
| 368 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 426493.6 | 8017961.6 |
| 369 | Habitat tree | euc habitat tree 10cm at 3m | 1 | 17/02/2024 | 425890.5 | 8017270.3 |
| 370 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425296.0 | 8018240.1 |
| 371 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425455.1 | 8018114.5 |
| 372 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425442.0 | 8018088.2 |
| 373 | Habitat tree | euc habitat tree 10cm at 2m | 1 | 17/02/2024 | 425433.8 | 8018047.0 |
| 374 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425444.5 | 8017956.4 |
| 375 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425454.2 | 8017933.2 |
| 376 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425448.4 | 8017923.1 |
| 377 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425438.3 | 8017866.4 |
| 378 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425455.3 | 8017825.3 |
| 379 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425444.5 | 8017789.4 |
| 380 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425427.7 | 8017780.1 |
| 381 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425426.0 | 8017776.7 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 382 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425442.6 | 8017765.4 |
| 383 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425430.0 | 8017757.8 |
| 384 | Habitat tree | euc habitat tree 2x hollow 8 and 10cm at 4m | 1 | 17/02/2024 | 425412.1 | 8017749.2 |
| 385 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425409.1 | 8017736.9 |
| 386 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425431.0 | 8017622.5 |
| 387 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425433.2 | 8017575.6 |
| 388 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425463.3 | 8017512.1 |
| 389 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425448.5 | 8017485.0 |
| 390 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425414.3 | 8017425.4 |
| 391 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425415.4 | 8017242.6 |
| 392 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425415.1 | 8017117.7 |
| 393 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425424.9 | 8017092.4 |
| 394 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425426.4 | 8017006.0 |
| 395 | Habitat tree | euc habitat tree | 0 | 16/02/2024 | 425409.0 | 8017001.3 |
| 396 | Habitat tree | large euc habitat tree | 0 | 13/02/2024 | 425404.0 | 8016979.6 |
| 397 | Habitat tree | habitat tree | 0 | 17/02/2024 | 425404.2 | 8016825.9 |
| 398 | Habitat tree | euc habitat tree hollow 12cm at 3m | 1 | 17/02/2024 | 425360.2 | 8016853.1 |
| 399 | Habitat tree | euc habitat tree hollow 10cm at 3m | 1 | 17/02/2024 | 425362.1 | 8016824.4 |
| 400 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425251.5 | 8016831.2 |
| 401 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425225.8 | 8016834.7 |
| 402 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425230.1 | 8016865.5 |
| 403 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425216.5 | 8016945.9 |
| 404 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425216.5 | 8017008.1 |
| 405 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425209.3 | 8017026.0 |
| 406 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425299.1 | 8017058.4 |
| 407 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425219.9 | 8017074.2 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 408 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425225.9 | 8017086.4 |
| 409 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425242.8 | 8017136.9 |
| 410 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425263.5 | 8017363.4 |
| 411 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425231.3 | 8017445.0 |
| 412 | Habitat tree | euc habitat tree hollow 8cm at 3m | 1 | 17/02/2024 | 425226.1 | 8017480.2 |
| 413 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425300.2 | 8017701.3 |
| 414 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425314.7 | 8017701.7 |
| 415 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425320.8 | 8017711.5 |
| 416 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425317.8 | 8017743.4 |
| 417 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425319.3 | 8017774.4 |
| 418 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425303.8 | 8017777.5 |
| 419 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425289.3 | 8017801.7 |
| 420 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425285.9 | 8017812.2 |
| 421 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425281.7 | 8017918.2 |
| 422 | Habitat tree | 2x euc habitat tree | 0 | 17/02/2024 | 425283.3 | 8017952.8 |
| 423 | Habitat tree | euc habitat tree 5cm at 3m | 1 | 17/02/2024 | 425281.2 | 8018049.9 |
| 424 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425289.2 | 8018084.9 |
| 425 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425309.8 | 8018127.8 |
| 426 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425274.6 | 8018148.1 |
| 427 | Habitat tree | euc habitat tree numerous small hollow at 6cm 3m | 1 | 17/02/2024 | 426410.7 | 8017063.8 |
| 428 | Habitat tree | brachy habitat tree | 0 | 17/02/2024 | 424986.0 | 8016948.9 |
| 429 | Habitat tree | large habitat tree unknown species | 0 | 17/02/2024 | 425074.5 | 8019207.4 |
| 430 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425398.2 | 8018151.3 |
| 431 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425391.4 | 8018141.7 |
| 432 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425396.9 | 8018085.6 |
| 433 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425413.4 | 8018068.4 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 434 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425396.2 | 8018046.4 |
| 435 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425393.1 | 8018034.5 |
| 436 | Habitat tree | brachy habitat tree | 0 | 17/02/2024 | 425402.1 | 8018003.6 |
| 437 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425384.0 | 8017983.9 |
| 438 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425379.2 | 8017953.6 |
| 439 | Habitat tree | euc habitat tree hollow 20 cm at 2m | 1 | 17/02/2024 | 425372.2 | 8017935.7 |
| 440 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425369.9 | 8017935.5 |
| 441 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425350.0 | 8017931.8 |
| 442 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425403.3 | 8017894.4 |
| 443 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425396.6 | 8017858.4 |
| 444 | Habitat tree | euc habitat tree hollow 20 cm at 2m | 1 | 17/02/2024 | 425396.1 | 8017835.9 |
| 445 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425395.6 | 8017831.5 |
| 446 | Habitat tree | habitat tree unknown species | 0 | 17/02/2024 | 425370.3 | 8017776.1 |
| 447 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425388.1 | 8017742.0 |
| 448 | Habitat tree | euc habitat tree 10cm hollow at 2m | 1 | 17/02/2024 | 425380.0 | 8017721.7 |
| 449 | Habitat tree | euc habitat tree 10cm hollow at 2m | 1 | 17/02/2024 | 425384.9 | 8017712.7 |
| 450 | Habitat tree | euc habitat tree 10cm hollow at 2m | 1 | 17/02/2024 | 425386.0 | 8017688.0 |
| 451 | Habitat tree | euc habitat tree 10cm hollow at 2m | 1 | 17/02/2024 | 425382.8 | 8017683.0 |
| 452 | Habitat tree | euc habitat tree 10cm hollow at 2m | 1 | 17/02/2024 | 425351.8 | 8017631.2 |
| 453 | Habitat tree | euc habitat tree | 0 | 17/02/2024 | 425386.5 | 8017520.0 |
| 454 | Habitat tree | euc habitat tree hollow 12cm at 2m | 1 | 18/02/2024 | 425376.1 | 8017398.3 |
| 455 | Habitat tree | euc habitat tree | 0 | 18/02/2024 | 425393.0 | 8017338.4 |
| 456 | Habitat tree | habitat tree no hollows | 0 | 17/02/2024 | 425365.8 | 8017315.7 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 457 | Habitat tree | habitat tree with small hollows | 1 | 17/02/2024 | 425361.6 | 8017281.6 |
| 458 | Habitat tree | euc no hollows | 0 | 17/02/2024 | 425368.3 | 8017019.3 |
| 459 | Habitat tree | euc small hollow | 1 | 17/02/2024 | 425389.4 | 8016993.9 |
| 460 | Habitat tree | habitat tree no hollows | 0 | 17/02/2024 | 425354.8 | 8016905.8 |
| 461 | Habitat tree | habitat tree with hollow | 1 | 17/02/2024 | 425306.6 | 8016818.0 |
| 462 | Habitat tree | habitat tree no hollows | 0 | 17/02/2024 | 425300.4 | 8016823.4 |
| 463 | Habitat tree | habitat tree small hollow | 1 | 17/02/2024 | 425299.4 | 8016843.2 |
| 464 | Habitat tree | small euc with small hollow | 1 | 17/02/2024 | 425303.2 | 8017099.7 |
| 465 | Habitat tree | euc with potentially small hollow | 1 | 17/02/2024 | 425312.9 | 8017236.8 |
| 466 | Habitat tree | euc with hollows | 1 | 17/02/2024 | 425307.2 | 8017356.2 |
| 467 | Habitat tree | euc with small hollow s | 1 | 17/02/2024 | 425306.3 | 8017367.6 |
| 468 | Habitat tree | euc with small hollow | 1 | 17/02/2024 | 425300.1 | 8017368.4 |
| 469 | Habitat tree | euc with hollows | 1 | 17/02/2024 | 425298.5 | 8017405.5 |
| 470 | Habitat tree | euc with small hollows | 1 | 17/02/2024 | 425302.9 | 8017444.3 |
| 471 | Habitat tree | euc with hollows | 1 | 17/02/2024 | 425306.0 | 8017456.3 |
| 472 | Habitat tree | euc with hollows | 1 | 17/02/2024 | 425318.6 | 8017467.3 |
| 473 | Habitat tree | euc small hollow | 1 | 17/02/2024 | 425323.9 | 8017498.3 |
| 474 | Habitat tree | habitat tree with hollows | 1 | 17/02/2024 | 425316.6 | 8017535.7 |
| 475 | Habitat tree | euc small hollows | 1 | 17/02/2024 | 425298.5 | 8017574.3 |
| 476 | Habitat tree | euc with hollows | 1 | 17/02/2024 | 425322.6 | 8017596.2 |
| 477 | Habitat tree | euc with small hollow | 1 | 17/02/2024 | 425317.3 | 8017704.3 |
| 478 | Habitat tree | euc with hollows | 1 | 17/02/2024 | 425324.2 | 8017745.0 |
| 479 | Habitat tree | euc small hollow | 1 | 17/02/2024 | 425323.1 | 8017788.3 |
| 480 | Habitat tree | euc with large trunk hollow | 1 | 17/02/2024 | 425339.2 | 8017849.4 |
| 481 | Habitat tree | euc no hollows | 0 | 17/02/2024 | 425337.0 | 8018078.4 |
| 482 | Habitat tree | euc no hollows | 0 | 17/02/2024 | 425022.6 | 8016983.5 |
| 483 | Habitat tree | euc with hollows | 1 | 17/02/2024 | 425207.1 | 8017964.2 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 484 | Habitat tree | euc no hollows | 0 | 17/02/2024 | 425211.4 | 8017811.9 |
| 485 | Habitat tree | euc no hollows | 0 | 17/02/2024 | 425224.8 | 8017801.4 |
| 486 | Habitat tree | euc habitat tree no hollows | 0 | 17/02/2024 | 425228.0 | 8017643.8 |
| 487 | Habitat tree | euc small hollow | 1 | 17/02/2024 | 425184.4 | 8017430.3 |
| 488 | Habitat tree | euc small hollow | 1 | 17/02/2024 | 425213.6 | 8017418.1 |
| 489 | Habitat tree | euc no hollows | 0 | 17/02/2024 | 425171.6 | 8017358.9 |
| 490 | Habitat tree | euc with hollows | 1 | 17/02/2024 | 425194.7 | 8017341.6 |
| 491 | Habitat tree | euc with hollow | 1 | 17/02/2024 | 425201.7 | 8017340.6 |
| 492 | Habitat tree | large euc no hollows | 0 | 17/02/2024 | 425199.2 | 8017334.2 |
| 493 | Habitat tree | large brachy | 0 | 17/02/2024 | 425176.1 | 8017223.9 |
| 494 | Habitat tree | large brachy | 0 | 17/02/2024 | 425178.8 | 8017142.9 |
| 495 | Habitat tree | euc small hollow | 1 | 17/02/2024 | 425182.2 | 8017089.4 |
| 496 | Habitat tree | stag big hollow owlet inside | 1 | 17/02/2024 | 425165.7 | 8017025.7 |
| 497 | Habitat tree | euc with hollows | 1 | 17/02/2024 | 425183.9 | 8017010.9 |
| 498 | Habitat tree | euc no hollows | 0 | 17/02/2024 | 425178.7 | 8016920.4 |
| 499 | Habitat tree | euc no hollows | 0 | 17/02/2024 | 425102.1 | 8016873.9 |
| 500 | Habitat tree | stag with hollow | 1 | 17/02/2024 | 425099.0 | 8016884.5 |
| 501 | Habitat tree | euc small hollow | 1 | 17/02/2024 | 425110.7 | 8016888.1 |
| 502 | Habitat tree | large euc small hollow | 1 | 17/02/2024 | 425078.8 | 8016888.6 |
| 503 | Habitat tree | large euc habitat tree  med hollow | 1 | 17/02/2024 | 425087.9 | 8016890.7 |
| 504 | Habitat tree | euc with hollows | 1 | 17/02/2024 | 425086.8 | 8016892.1 |
| 505 | Habitat tree | euc with hollow | 1 | 17/02/2024 | 425105.6 | 8017009.3 |
| 506 | Habitat tree | euc with hollows | 1 | 17/02/2024 | 425114.6 | 8017040.5 |
| 507 | Habitat tree | euc with hollows | 1 | 17/02/2024 | 425098.1 | 8017048.4 |
| 508 | Habitat tree | stump with hollow | 1 | 18/02/2024 | 425089.1 | 8017067.6 |
| 509 | Habitat tree | euc habitat numerous hollows at 2,3m | 1 | 6/03/2024 | 425114.6 | 8017269.0 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 510 | Habitat tree | euc habitat tree | 0 | 6/03/2024 | 425110.7 | 8017291.4 |
| 511 | Habitat tree | euc habitat tree | 0 | 6/03/2024 | 425108.6 | 8017296.5 |
| 512 | Habitat tree | euc habitat tree small hollow at 3m | 1 | 6/03/2024 | 425131.2 | 8017365.7 |
| 513 | Habitat tree | euc habitat tree | 0 | 6/03/2024 | 425131.3 | 8017397.7 |
| 514 | Habitat tree | euc habitat tree large hollow 16cm at 2 m | 1 | 6/03/2024 | 425136.5 | 8017876.2 |
| 515 | Habitat tree | euc habitat tree numerous hollow but large hollow 14cm at 4 m | 1 | 6/03/2024 | 425124.6 | 8017876.3 |
| 516 | Habitat tree | euc habitat tree numerous small 6 to 8 cm hollow s | 1 | 6/03/2024 | 425127.9 | 8017930.6 |
| 517 | Habitat tree | euc habitat tree | 0 | 6/03/2024 | 425139.1 | 8017940.1 |
| 518 | Habitat tree | euc habitat tree | 0 | 6/03/2024 | 425154.9 | 8018042.7 |
| 519 | Habitat tree | euc habitat tree | 0 | 6/03/2024 | 425129.3 | 8018043.2 |
| 520 | Habitat tree | euc habitat tree | 0 | 6/03/2024 | 425133.2 | 8018179.2 |
| 521 | Habitat tree | euc habitat tree 1 hollow 7cm at 2m | 1 | 6/03/2024 | 423938.6 | 8026683.8 |
| 522 | Habitat tree | euc habitat tree | 0 | 6/03/2024 | 424019.5 | 8026687.2 |
| 523 | Habitat tree | euc habitat tree | 0 | 6/03/2024 | 424153.7 | 8026699.9 |
| 524 | Habitat tree | euc habitat tree hollow 12cm at 3m | 1 | 6/03/2024 | 424196.1 | 8026676.8 |
| 525 | Habitat tree | euc habitat tree | 0 | 6/03/2024 | 424203.1 | 8026674.8 |
| 526 | Habitat tree | euc habitat tree | 0 | 6/03/2024 | 424271.2 | 8026683.4 |
| 527 | Habitat tree | euc habitat tree | 0 | 6/03/2024 | 424271.5 | 8026682.9 |
| 528 | Habitat tree | euc habitat tree 8cm hollow at 3m | 1 | 6/03/2024 | 424320.3 | 8026690.7 |
| 529 | Habitat tree | euc habitat tree numerous 8cm hollow at 3m | 1 | 6/03/2024 | 424326.1 | 8026696.3 |
| 530 | Habitat tree | euc habitat tree numerous 8cm hollow at 3m | 1 | 6/03/2024 | 424582.5 | 8026692.6 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 531 | Habitat tree | euc habitat tree numerous 8cm hollow at 3m | 1 | 6/03/2024 | 424648.4 | 8026619.3 |
| 532 | Habitat tree | euc habitat tree | 0 | 6/03/2024 | 424634.9 | 8026600.4 |
| 533 | Habitat tree | euc habitat tree | 0 | 6/03/2024 | 424574.8 | 8026611.3 |
| 534 | Habitat tree | euc habitat tree | 0 | 6/03/2024 | 423879.4 | 8026585.1 |
| 535 | Habitat tree | euc habitat tree numerous medium hollow 8cm at 3m to 4m | 1 | 6/03/2024 | 424434.2 | 8026124.3 |
| 536 | Habitat tree | euc habitat tree large hollow 12cm at 3m to 4m | 1 | 6/03/2024 | 424519.1 | 8026023.0 |
| 537 | Habitat tree | euc habitat tree | 0 | 6/03/2024 | 424505.5 | 8026045.6 |
| 538 | Habitat tree | euc habitat tree | 0 | 6/03/2024 | 424366.4 | 8026022.9 |
| 539 | Habitat tree | euc habitat tree medium hollow 8cm at 2m | 1 | 6/03/2024 | 423186.4 | 8023998.5 |
| 540 | Habitat tree | euc habitat | 0 | 6/03/2024 | 423163.8 | 8023990.8 |
| 541 | Habitat tree | euc habitat | 0 | 6/03/2024 | 423218.5 | 8023999.8 |
| 542 | Habitat tree | euc habitat very large possible large hollow in crown possum scratching on tree | 1 | 6/03/2024 | 423246.3 | 8024020.2 |
| 543 | Habitat tree | euc habitat tree large 12cm at 3m | 1 | 6/03/2024 | 423237.8 | 8024041.7 |
| 544 | Habitat tree | euc habitat tree large 12cm at 3m | 1 | 6/03/2024 | 423317.6 | 8024038.0 |
| 545 | Habitat tree | euc habitat tree large 12cm at 3m | 1 | 6/03/2024 | 423350.4 | 8024049.7 |
| 546 | Habitat tree | euc habitat tree large 12cm at 3m | 1 | 6/03/2024 | 423354.0 | 8024058.0 |
| 547 | Habitat tree | euc habitat tree | 0 | 7/03/2024 | 423391.8 | 8024011.8 |
| 548 | Habitat tree | euc habitat tree | 0 | 7/03/2024 | 423421.4 | 8024026.8 |
| 549 | Habitat tree | euc habitat tree 2x hollow 10cm at 3m | 2 | 7/03/2024 | 423557.6 | 8024065.1 |
| 550 | Habitat tree | euc habitat tree | 0 | 7/03/2024 | 423836.0 | 8024019.3 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 551 | Habitat tree | euc habitat tree 10cm at 3m hollow | 1 | 7/03/2024 | 423914.2 | 8024029.5 |
| 552 | Habitat tree | euc habitat tree 2x hollow 10cm at 3m | 2 | 7/03/2024 | 423591.8 | 8023971.1 |
| 553 | Habitat tree | euc habitat tree | 0 | 7/03/2024 | 423591.7 | 8023983.0 |
| 554 | Habitat tree | euc habitat tree | 0 | 7/03/2024 | 423574.8 | 8023958.2 |
| 555 | Habitat tree | euc habitat tree | 0 | 7/03/2024 | 423552.0 | 8023952.5 |
| 556 | Habitat tree | euc habitat tree | 0 | 7/03/2024 | 423379.2 | 8023932.2 |
| 557 | Habitat tree | euc habitat tree | 0 | 7/03/2024 | 423347.2 | 8023929.1 |
| 558 | Habitat tree | euc habitat tree | 0 | 7/03/2024 | 423313.6 | 8023978.6 |
| 559 | Habitat tree | euc habitat tree | 0 | 7/03/2024 | 423311.5 | 8023993.0 |
| 560 | Habitat tree | euc habitat tree | 0 | 7/03/2024 | 423230.5 | 8023966.3 |
| 561 | Habitat tree | euc habitat tree | 0 | 7/03/2024 | 423184.6 | 8023956.8 |
| 562 | Habitat tree | euc habitat tree hollow 8cm to 12cm at 3m to 4m large tree for area | 1 | 7/03/2024 | 423153.9 | 8023966.1 |
| 563 | Habitat tree | euc habitat tree hollow 6cm at 3m | 1 | 7/03/2024 | 423132.8 | 8023975.6 |
| 564 | Habitat tree | euc habitat treem | 0 | 7/03/2024 | 423129.7 | 8023956.7 |
| 565 | Habitat tree | euc habitat tree small hollow 6cm at 4m | 1 | 8/03/2024 | 423163.1 | 8023669.4 |
| 566 | Habitat tree | euc habitat tree small hollow 6cm at 4m | 1 | 8/03/2024 | 423255.7 | 8023669.4 |
| 567 | Habitat tree | euc habitat tree | 0 | 8/03/2024 | 423456.8 | 8023671.9 |
| 568 | Habitat tree | euc habitat tree | 0 | 8/03/2024 | 424051.7 | 8023666.9 |
| 569 | Habitat tree | euc habitat tree hollow 8cm at 4m | 1 | 8/03/2024 | 424080.6 | 8023608.0 |
| 570 | Habitat tree | euc habitat tree hollow 8cm at 3m | 1 | 8/03/2024 | 423499.8 | 8023599.1 |
| 571 | Habitat tree | euc habitat tree | 0 | 8/03/2024 | 423490.0 | 8023592.9 |
| 572 | Habitat tree | euc habitat tree | 0 | 8/03/2024 | 423379.1 | 8023581.3 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 573 | Habitat tree | euc habitat tree | 0 | 8/03/2024 | 424640.5 | 8022405.6 |
| 574 | Habitat tree | euc habitat tree | 0 | 8/03/2024 | 423214.9 | 8023250.6 |
| 575 | Habitat tree | euc habitat tree | 0 | 8/03/2024 | 423288.8 | 8022945.1 |
| 576 | Habitat tree | euc habitat tree hollow 20cm at 2m | 1 | 8/03/2024 | 423306.6 | 8022908.2 |
| 577 | Habitat tree | euc habitat tree | 0 | 8/03/2024 | 423473.1 | 8024143.1 |
| 578 | Habitat tree | euc habitat tree | 0 | 8/03/2024 | 423441.5 | 8024141.3 |
| 579 | Habitat tree | euc habitat tree | 0 | 8/03/2024 | 423262.9 | 8024122.6 |
| 580 | Habitat tree | euc habitat tree lots hollow s in huge euc small to large | 1 | 8/03/2024 | 423203.0 | 8023478.2 |
| 581 | Habitat tree | euc habitat tree l | 0 | 8/03/2024 | 423219.2 | 8023484.1 |
| 582 | Habitat tree | euc habitat tree lots hollow s in huge euc small to large also potential possum scratchings on tree | 1 | 8/03/2024 | 423230.2 | 8023461.1 |
| 583 | Habitat tree | euc habitat tree l | 0 | 8/03/2024 | 423330.2 | 8023498.3 |
| 584 | Habitat tree | euc habitat tree l | 0 | 8/03/2024 | 424136.2 | 8023428.2 |
| 585 | Habitat tree | euc habitat tree l | 0 | 8/03/2024 | 424258.8 | 8022895.0 |
| 586 | Habitat tree | euc habitat tree l | 0 | 8/03/2024 | 423893.6 | 8022786.6 |
| 587 | Habitat tree | euc habitat tree l | 0 | 8/03/2024 | 422720.7 | 8022037.8 |
| 588 | Habitat tree | euc habitat tree l | 0 | 8/03/2024 | 422407.2 | 8021966.8 |
| 589 | Habitat tree | euc habitat tree l | 0 | 8/03/2024 | 422052.3 | 8021801.9 |
| 590 | Habitat tree | euc habitat tree l | 0 | 8/03/2024 | 422040.4 | 8021799.0 |
| 591 | Habitat tree | euc habitat tree | 0 | 8/03/2024 | 422025.1 | 8021786.5 |
| 592 | Habitat tree | euc habitat tree | 0 | 8/03/2024 | 421946.3 | 8021708.8 |
| 593 | Habitat tree | euc habitat tree 1x hollow 7cm at 3m | 1 | 8/03/2024 | 421905.3 | 8021663.9 |
| 594 | Habitat tree | euc habitat tree | 0 | 8/03/2024 | 421780.0 | 8021548.8 |
| 595 | Habitat tree | euc habitat tree | 0 | 8/03/2024 | 421763.3 | 8021533.8 |
| 596 | Habitat tree | euc habitat tree | 0 | 9/03/2024 | 421723.6 | 8021489.8 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 597 | Habitat tree | euc habitat tree | 0 | 9/03/2024 | 421698.6 | 8021472.2 |
| 598 | Habitat tree | euc habitat tree | 0 | 9/03/2024 | 421567.2 | 8021344.3 |
| 599 | Habitat tree | euc habitat tree hollow 10cm at 4m | 1 | 9/03/2024 | 421481.2 | 8021267.9 |
| 600 | Habitat tree | euc habitat tree 10cm at 3m | 1 | 9/03/2024 | 421218.9 | 8021023.5 |
| 601 | Habitat tree | euc habitat tree 8cm at 2m | 1 | 9/03/2024 | 421088.9 | 8020894.4 |
| 602 | Habitat tree | euc habitat tree 10cm at 2m | 1 | 9/03/2024 | 421014.8 | 8020831.0 |
| 603 | Habitat tree | corymbia habitat tree small hollow | 1 | 8/03/2024 | 419926.5 | 8018270.7 |
| 604 | Habitat tree | corymbia habitat tree | 0 | 8/03/2024 | 419812.3 | 8017986.2 |
| 605 | Habitat tree | corymbia habitat tree | 0 | 8/03/2024 | 423217.3 | 8023855.2 |
| 606 | Habitat tree | large euc habitat tree no hollows | 0 | 8/03/2024 | 423313.0 | 8023846.3 |
| 607 | Habitat tree | euc habitat tree | 0 | 8/03/2024 | 423423.3 | 8023855.6 |
| 608 | Habitat tree | euc habitat tree | 0 | 8/03/2024 | 423449.3 | 8023847.3 |
| 609 | Habitat tree | euc habitat trees no hollows | 0 | 8/03/2024 | 423548.4 | 8023846.5 |
| 610 | Habitat tree | large euc no hollows | 0 | 8/03/2024 | 423562.2 | 8023851.3 |
| 611 | Habitat tree | large habitat tree, Sersalisea? PEC tree | 0 | 9/03/2024 | 423744.2 | 8023850.5 |
| 612 | Habitat tree | euc habitat trees no hollows | 0 | 9/03/2024 | 423763.8 | 8023753.6 |
| 613 | Habitat tree | euc habitat tree | 0 | 9/03/2024 | 423444.4 | 8023747.0 |
| 614 | Habitat tree | euc habitat tree small hollow | 1 | 9/03/2024 | 423377.6 | 8023190.3 |
| 615 | Habitat tree | euc habitat tree | 0 | 9/03/2024 | 423302.4 | 8023187.8 |
| 616 | Habitat tree | euc habitat tree | 0 | 9/03/2024 | 423681.9 | 8022366.3 |
| 617 | Habitat tree | euc habitat tree | 0 | 9/03/2024 | 424955.0 | 8020225.3 |
| 618 | Habitat tree | euc habitat tree | 0 | 9/03/2024 | 424958.0 | 8019958.8 |
| 619 | Habitat tree | euc habitat tree | 0 | 9/03/2024 | 424981.0 | 8019958.0 |
| 620 | Habitat tree | euc habitat tree numerous hollows | 1 | 9/03/2024 | 424964.0 | 8019621.5 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 621 | Habitat tree | euc habitat tree numerous hollows | 1 | 9/03/2024 | 426087.5 | 8018070.1 |
| 622 | Habitat tree | euc habitat tree numerous hollows | 1 | 9/03/2024 | 425519.8 | 8018159.4 |
| 623 | Habitat tree | euc habitat tree | 0 | 9/03/2024 | 425482.3 | 8018264.2 |
| 624 | Habitat tree | euc habitat tree | 0 | 9/03/2024 | 425453.5 | 8018315.1 |
| 625 | Habitat tree | euc habitat tree | 0 | 9/03/2024 | 425302.0 | 8018305.6 |
| 626 | Habitat tree | euc habitat tree | 0 | 9/03/2024 | 425309.5 | 8018289.0 |
| 627 | Habitat tree | euc habitat tree | 0 | 9/03/2024 | 425270.3 | 8018243.9 |
| 628 | Habitat tree | euc habitat tree | 0 | 9/03/2024 | 425259.4 | 8018246.1 |
| 629 | Habitat tree | euc habitat tree | 0 | 9/03/2024 | 423717.2 | 8022527.0 |
| 630 | Habitat tree | euc habitat tree | 0 | 9/03/2024 | 423613.9 | 8022531.8 |
| 631 | Habitat tree | corymbia 10m tall. no hollows. | 0 | 8/03/2024 | 423466.7 | 8022574.8 |
| 632 | Habitat tree | 2x corymbia 8m tall. no hollows. | 0 | 8/03/2024 | 423510.6 | 8022433.6 |
| 633 | Habitat tree | corymbia 6m tall. no hollows. | 0 | 8/03/2024 | 423592.4 | 8022432.4 |
| 634 | Habitat tree | corymbia 7m tall. no hollows. | 0 | 8/03/2024 | 423593.4 | 8022425.4 |
| 635 | Habitat tree | corymbia 8m tall. no hollows. | 0 | 8/03/2024 | 423607.3 | 8022453.4 |
| 636 | Habitat tree | corymbia 6m tall. no hollows. | 0 | 8/03/2024 | 423709.6 | 8022452.3 |
| 637 | Habitat tree | corymbia 4m , hollow horizontal limb | 1 | 8/03/2024 | 419811.4 | 8017977.2 |
| 638 | Habitat tree | corymbia, 10m , no hollows | 0 | 8/03/2024 | 419862.4 | 8018103.9 |
| 639 | Habitat tree | corymbia 4m, hollow limb, verticle | 1 | 9/03/2024 | 419941.5 | 8018306.0 |
| 640 | Habitat tree | corymbia 7m no hollows | 0 | 9/03/2024 | 420310.2 | 8019231.2 |
| 641 | Habitat tree | corymbia 6m hollowlimb horizontal | 1 | 9/03/2024 | 420354.1 | 8019361.7 |
| 642 | Habitat tree | corymbia 6m, no hollow | 0 | 10/03/2024 | 420357.1 | 8019368.1 |
| 643 | Habitat tree | habitat tree no hollows | 0 | 11/03/2024 | 420641.7 | 8020075.8 |
| 644 | Habitat tree | euc habitat tree | 0 | 11/03/2024 | 420647.2 | 8020091.9 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 645 | Habitat tree | euc habitat tree | 0 | 11/03/2024 | 420767.9 | 8020401.8 |
| 646 | Habitat tree | euc habitat tree | 0 | 11/03/2024 | 420903.8 | 8020712.2 |
| 647 | Habitat tree | euc habitat tree | 0 | 11/03/2024 | 420917.6 | 8020716.3 |
| 648 | Habitat tree | euc habitat tree | 0 | 11/03/2024 | 421128.8 | 8020929.7 |
| 649 | Habitat tree | large brachy | 0 | 11/03/2024 | 421238.2 | 8021035.8 |
| 650 | Habitat tree | euc habitat tree little hollow | 1 | 11/03/2024 | 421349.6 | 8021133.1 |
| 651 | Habitat tree | euc habitat tree | 0 | 11/03/2024 | 421598.1 | 8021371.8 |
| 652 | Habitat tree | large brachy | 0 | 11/03/2024 | 421666.2 | 8021434.7 |
| 653 | Habitat tree | half dead euc, 2 hollows 6cm 8 cm. 3m | 2 | 11/03/2024 | 421748.6 | 8021521.4 |
| 654 | Habitat tree | large brachy | 0 | 11/03/2024 | 421863.3 | 8021632.2 |
| 655 | Habitat tree | euc habitat 1 small hollow 2.5 m high 7cm | 1 | 9/03/2024 | 421911.0 | 8021668.0 |
| 656 | Habitat tree | euc habitat tree | 0 | 9/03/2024 | 421932.1 | 8021688.6 |
| 657 | Habitat tree | euc habitat tree small hollow 6cm at 2m | 1 | 9/03/2024 | 421981.7 | 8021748.4 |
| 658 | Habitat tree | euc habitat tree | 0 | 10/03/2024 | 422063.1 | 8021813.4 |
| 659 | Habitat tree | euc habitat tree | 0 | 10/03/2024 | 422121.1 | 8021859.9 |
| 660 | Habitat tree | euc habitat tree | 0 | 10/03/2024 | 422157.1 | 8021898.5 |
| 661 | Habitat tree | euc habitat tree | 0 | 10/03/2024 | 422268.5 | 8021936.2 |
| 662 | Habitat tree | euc habitat tree | 0 | 10/03/2024 | 422577.5 | 8021999.2 |
| 663 | Habitat tree | euc habitat tree | 0 | 10/03/2024 | 424329.8 | 8022322.0 |
| 664 | Habitat tree | euc habitat tree | 0 | 10/03/2024 | 424507.8 | 8022351.9 |
| 665 | Habitat tree | euc habitat tree | 0 | 10/03/2024 | 424533.3 | 8022355.1 |
| 666 | Habitat tree | euc habitat tree | 0 | 10/03/2024 | 424982.9 | 8022445.3 |
| 667 | Habitat tree | euc habitat tree | 0 | 10/03/2024 | 425096.0 | 8022462.2 |
| 668 | Habitat tree | euc habitat tree | 0 | 10/03/2024 | 425144.8 | 8022472.1 |
| 669 | Habitat tree | euc habitat tree | 0 | 10/03/2024 | 425399.4 | 8019316.6 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| 670 | Habitat tree | euc habitat tree small hollow less 5 cm | 1 | 10/03/2024 | 425424.1 | 8019340.4 |
| 671 | Habitat tree | euc habitat tree one small hollow less 5cm | 1 | 10/03/2024 | 425388.6 | 8019446.4 |
| 672 | Habitat tree | euc habitat tree | 0 | 10/03/2024 | 425371.1 | 8019470.8 |
| 673 | Habitat tree | euc habitat tree | 0 | 10/03/2024 | 425393.2 | 8019492.8 |
| 674 | Habitat tree | euc habit tree | 0 | 10/03/2024 | 425374.3 | 8019586.1 |
| 675 | Habitat tree | euc habitat tree large hollow 20cm | 1 | 10/03/2024 | 425426.2 | 8020461.0 |
| 676 | Habitat tree | bauhinia cunning habitat tree | 0 | 10/03/2024 | 425591.9 | 8020553.0 |
| 677 | Habitat tree | habitat tree euc with large hollows , half alive | 1 | 10/03/2024 | 425588.0 | 8019817.1 |
| 678 | Habitat tree | habitat tree | 0 | 10/03/2024 | 425602.2 | 8019831.1 |
| 679 | Habitat tree | euc habitat tree with medium hollow | 1 | 10/03/2024 | 425594.3 | 8019661.8 |
| 680 | Habitat tree | euc habitat tree | 0 | 10/03/2024 | 425585.1 | 8019610.0 |
| 681 | Habitat tree | euc habitat tree | 0 | 10/03/2024 | 425601.0 | 8019446.3 |
| 682 | Habitat tree | euc habitat tree 1 small hollow | 1 | 10/03/2024 | 425637.9 | 8019323.7 |
| 683 | Habitat tree | euc habitat tree | 0 | 10/03/2024 | 425587.9 | 8019233.9 |
| 684 | Habitat tree | euc habitat tree | 0 | 10/03/2024 | 425590.9 | 8018954.1 |
| 685 | Habitat tree | euc habitat tree small hollows | 1 | 10/03/2024 | 425576.6 | 8018796.2 |
| 686 | Habitat tree | euc habitat tree | 0 | 10/03/2024 | 425557.6 | 8018768.8 |
| 687 | Habitat tree | three eucs | 0 | 10/03/2024 | 425603.2 | 8018438.1 |
| 688 | Habitat tree | euc habitat tree | 0 | 10/03/2024 | 425578.5 | 8018398.8 |
| 689 | Habitat tree | euc habitat tree | 0 | 10/03/2024 | 425559.5 | 8018361.8 |
| 690 | Habitat tree | euc habitat tree | 0 | 10/03/2024 | 426355.6 | 8017868.3 |
| 691 | Habitat tree | eucalypt habitat tree | 0 | 10/03/2024 | 426386.5 | 8017850.9 |
| 692 | Habitat tree | euc habitat tree | 0 | 10/03/2024 | 426364.8 | 8017714.0 |
| 693 | Habitat tree | euc habitat tree 10cm hollow | 1 | 10/03/2024 | 426401.5 | 8017574.6 |
| 694 | Habitat tree | euc habitat tree | 0 | 10/03/2024 | 426387.8 | 8017552.8 |

| No. | Type | Field comment | Hollow – 1<br>No hollow - 0 | Date | Eastings | Northings |
|---|---|---|---|---|---|---|
| **Total hollow-bearing trees** | | | **328** | | | |

**Bilby burrows – Broome**

| No. | Site | Observation | Species | Date | Lat | Long | Comment | Photo |
|---|---|---|---|---|---|---|---|---|
| 1 | Site G and H | Burrow | *Macrotis lagotis* | 15/02/2024 | -17.910386 | 122.297336 | possible old bilby burrow |  |
| 2 | Site G and H | Burrow | *Macrotis lagotis* | 15/02/2024 | -17.9029916166667 | 122.296562533333 | long unburned 30% ground cover and bare ground, numerous old digs but lots of agile digs as well. burrow not recent used 6 to 12 months. no recent digs. spatter on top of apron. |  |
| 3 | Site G and H | Burrow | *Macrotis lagotis* | 15/02/2024 | -17.9036073333333 | 122.29737225 | possible old burrows under termite mound, large apron left. one termite mound cave in the other side all long unused |  |

| No. | Site | Observation | Species | Date | Lat | Long | Comment | Photo |
|---|---|---|---|---|---|---|---|---|
| 4 | Site G and H | Burrow | *Macrotis lagotis* | 15/02/2024 | -17.9066886666667 | 122.296810666667 | possible old burrow few old digs around long unused pic shows disturbed soil from me. Area is 40 % ground cover and littler long unburned, surround by much thicker habitat |  |
| 5 | Site F | Burrow | *Macrotis lagotis* | 7/03/2024 | -17.85377675 | 122.28476575 | Old burrow (under termite mound) |  |
| 6 | Site F | Burrow | *Macrotis lagotis* | 7/03/2024 | -17.85457095 | 122.28193705 | old burrow? maybe monitor, diggings nearby |  |

| No. | Site | Observation | Species | Date | Lat | Long | Comment | Photo |
|---|---|---|---|---|---|---|---|---|
| 7 | Site F | Burrow | *Macrotis lagotis* | 7/03/2024 | -17.8544465 | 122.285278066667 | photos of old burrow, digs and other monitor digs adjacent |  |
| 8 | Site F | Burrow | *Macrotis lagotis* | 7/03/2024 | -17.8725832166667 | 122.27945645 | old bilby burrow |  |

| No. | Site | Observation | Species | Date | Lat | Long | Comment | Photo |
|---|---|---|---|---|---|---|---|---|
| 9 | Site F | Burrow | *Macrotis lagotis* | 7/03/2024 | -17.8724997666667 | 122.278767483333 | old bilby burrow collapsed 2 sided burrow |  |
| 10 | Site F | Burrow | *Macrotis lagotis* | 7/03/2024 | -17.87249795 | 122.278710116667 | old bilby burrow single entrance several months since used |  |

| No. | Site | Observation | Species | Date | Lat | Long | Comment | Photo |
|---|---|---|---|---|---|---|---|---|
| 11 | Site F | Burrow | *Macrotis lagotis* | 7/03/2024 | -17.8767472166667 | 122.279884916667 | recent rain has impacted it, fairly recent burrow, approx 1 month since use. edge track |  |
| 12 | Site F | Burrow | *Macrotis lagotis* | 7/03/2024 | -17.8755808666667 | 122.279891283333 | old burrow but intact on side of track numerous old digs around |  |

| No. | Site | Observation | Species | Date | Lat | Long | Comment | Photo |
|---|---|---|---|---|---|---|---|---|
| 13 | Site F | Burrow | *Macrotis lagotis* | 8/03/2024 | -17.86664343330 | 122.278616550 | Bilby burrow, smaller animal |  |
| 14 | Site F | Burrow | *Macrotis lagotis* | 8/03/2024 | -17.873037 | 122.279258 | burrow has side mark used within the week |  |
| 15 | Site F | Burrow | *Macrotis lagotis* | 8/03/2024 | -17.8731090833333 | 122.279498616667 | burrow has side mark used within the week |  |

| No. | Site | Observation | Species | Date | Lat | Long | Comment | Photo |
|---|---|---|---|---|---|---|---|---|
| 16 | Site F | Burrow | *Macrotis lagotis* | 8/03/2024 | -17.8622185 | 122.284629683333 | potential very old burrow system, partially caved in and overgrown |  |
| 17 | Site F | Burrow | *Macrotis lagotis* | 9/03/2024 | -17.8811622833333 | 122.28002455 | Burrow with fresh soil and fresh scratchings and digs along track<br>(was observed and noted on the 7/03/2024 as inactive but intact) |  |

| No. | Site | Observation | Species | Date | Lat | Long | Comment | Photo |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | |  |
| 18 | Site F | Burrow | *Macrotis lagotis* | 9/03/2024 | -17.8787100166667 | 122.279967333333 | old burrow in track spoil |  |

| No. | Site | Observation | Species | Date | Lat | Long | Comment | Photo |
|---|---|---|---|---|---|---|---|---|
| 19 | Site F | Burrow | *Macrotis lagotis* | 9/03/2024 | -17.87187321670 | 122.2818781670 | 2 old burrows |   |
| 20 | Site F | Burrow | *Macrotis lagotis* | 9/03/2024 | -17.87163643330 | 122.2821642330 | Disused burrow |  |

| No. | Site | Observation | Species | Date | Lat | Long | Comment | Photo |
|---|---|---|---|---|---|---|---|---|
| 21 | Site F | Burrow | *Macrotis lagotis* | 9/03/2024 | -17.8716550 | 122.28273460 | Old burrow |  |
| 22 | Site F | Burrow | *Macrotis lagotis* | 9/03/2024 | -17.8726680 | 122.2812340830 | Disused burrow |  |
| 25 | Site F | Burrow | *Macrotis lagotis* | 9/03/2024 | -17.87264380 | 122.2809212170 | Disused burrow |  |

| No. | Site | Observation | Species | Date | Lat | Long | Comment | Photo |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| 26 | Site F | Burrow | *Macrotis lagotis* | 9/03/2024 | -17.8726205 | 122.279154766667 | old bilby burrow |  |
| 27 | Site F | Burrow | *Macrotis lagotis* | 9/03/2024 | -17.8727586833333 | 122.2779672 | old bilby burrow |  |
| 28 | Site F | Burrow | *Macrotis lagotis* | 9/03/2024 | -17.8846352833333 | 122.285008533333 | Good active burrow. prints on spoil. |  |

| No. | Site | Observation | Species | Date | Lat | Long | Comment | Photo |
|---|---|---|---|---|---|---|---|---|
| 29 | Site F | Burrow | *Macrotis lagotis* | 9/03/2024 | -17.88373395 | 122.285170266667 | Good active burrow |  |
| 30 | Site F | Burrow | *Macrotis lagotis* | 9/03/2024 | -17.8824770666667 | 122.279742883333 | very old burrow |  |
| 31 | Site F | Burrow | *Macrotis lagotis* | 10/03/2024 | -17.8841384333333 | 122.282628716667 | Old burrow |  |

| No. | Site | Observation | Species | Date | Lat | Long | Comment | Photo |
|---|---|---|---|---|---|---|---|---|
| 32 | Site F | Burrow | *Macrotis lagotis* | 10/03/2024 | -17.8845781166667 | 122.282423416667 | Old Burrow |  |
| 33 | Site F | Burrow | *Macrotis lagotis* | 10/03/2024 | -17.8843379166667 | 122.280135566667 | Old inactive burrow |  |

| No. | Site | Observation | Species | Date | Lat | Long | Comment | Photo |
|---|---|---|---|---|---|---|---|---|
| 34 | Site F | Burrow | *Macrotis lagotis* | 9/03/2024 | -17.8829452166667 | 122.285545833333 | 1 recently active burrow |  |

**Bilby evidence recorded at Broome**

| Site | Record type | Date | Status / comment | Lat | Long |
|---|---|---|---|---|---|
| G and H | Burrow | 15/02/2024 | Possible old burrow | -17.91038624 | 122.29733617 |
| G and H | Burrow | 15/02/2024 | Not recently used | -17.9029916166667 | 122.296562533333 |
| G and H | Diggings | 15/02/2024 | Several old digs in area | -17.9033303666667 | 122.297171133333 |
| G and H | Diggings | 15/02/2024 | Several old digs in area | -17.9038452333333 | 122.2973926 |
| G and H | Burrow | 15/02/2024 | Possible old burrow, long unused | -17.9036073333333 | 122.29737225 |
| G and H | Burrow | 15/02/2024 | Possible old burrow, long unused | -17.9066886666667 | 122.296810666667 |
| G and H | Diggings | 16/02/2024 | bilby digs at base of camelbush | -17.92723016 | 122.29542541 |
| G and H | Diggings | 17/02/2024 | bilby digs at base of pluchea numerous digs around | -17.9272373333333 | 122.2956468 |
| Site F | Burrow | 7/03/2024 | Old burrow (under termite mound) | -17.85377675 | 122.28476575 |

| Site | Record type | Date | Status / comment | Lat | Long |
|---|---|---|---|---|---|
| Site F | Burrow | 7/03/2024 | Old bilby burrow | 122.27945645 | 122.27945645 |
| Site F | Burrow | 7/03/2024 | Old burrow collapsed – 2 sided burrow | -17.8724997666667 | 122.278767483333 |
| Site F | Burrow | 7/03/2024 | Old burrow, several months since used | -17.87249795 | 122.278710116667 |
| Site F | Diggings | 7/03/2024 | Numerous old digs along track | -17.87579556 | 122.27988241 |
| Site F | Diggings | 7/03/2024 | Numerous old and fresh digs along track | -17.8736047833333 | 122.279716216667 |
| Site F | Diggings | 7/03/2024 | Digs at base of pindan wattle (*A. eriopoda*) | -17.8814849166667 | 122.280070816667 |
| Site F | Burrow | 7/03/2024 | Recent burrow, approx. 1 month since use | -17.8767472166667 | 122.279884916667 |
| Site F | Burrow | 7/03/2024 | Old burrow but intact. on side of track numerous old digs around | -17.8755808666667 | 122.279891283333 |
| Site F | Burrow | 7/03/2024 | Old burrow but intact on side of track | -17.8741013666667 | 122.279920516667 |
| Site F | Diggings | 7/03/2024 | Lots small diggings | -17.8494762 | 122.282110783333 |
| Site F | Diggings | 8/03/2024 | Bilby burrow, smaller animal | -17.86664343330 | 122.278616550 |
| Site F | Diggings | 8/03/2024 | fresh plate digs | -17.8733653666667 | 122.277597983333 |
| Site F | Diggings | 8/03/2024 | fresh plate and conical digs | -17.8731568833333 | 122.278391533333 |
| Site F | Diggings | 8/03/2024 | fresh plate and conical digs also prints in fresh dug sand | -17.87307775 | 122.278848516667 |
| Site F | Burrow | 8/03/2024 | Burrow recently used (has side mark used within the week) | -17.873037 | 122.279258 |
| Site F | Burrow | 8/03/2024 | Burrow recently used (has side mark used within the week) | -17.8731090833333 | 122.279498616667 |
| Site F | Burrow | 8/03/2024 | Potential very old burrow system, partially caved in and overgrown | -17.8622185 | 122.284629683333 |
| Site F | Diggings | 8/03/2024 | potential fresh bilby digging within the last week | -17.86245035 | 122.284468933333 |
| Site F | Diggings | 8/03/2024 | potential fresh digging | -17.8625405 | 122.27934035 |
| Site F | Diggings | 8/03/2024 | bilby dig? fresh | -17.8693143833333 | 122.2815503 |
| Site F | Diggings | 8/03/2024 | fresh dig | -17.8694043166667 | 122.28115975 |
| Site F | Burrow | 9/03/2024 | Burrow with fresh soil and fresh scratchings and digs along track | -17.8811622833333 | 122.28002455 |
| Site F | Burrow | 9/03/2024 | Two old burrows | -17.87187321670 | 122.2818781670 |
| Site F | Burrow | 9/03/2024 | Old burrow on track | -17.8716550 | 122.28273460 |
| Site F | Burrow | 9/03/2024 | Possible decoy burrow. prints on spoil. | -17.8846352833333 | 122.285008533333 |
| Site F | Burrow | 9/03/2024 | Possible decoy burrow | -17.88373395 | 122.285170266667 |
| Site F | Burrow | 9/03/2024 | Active burrow. Fresh spoil | -17.8841298666667 | 122.2860283 |
| Site F | Burrow | 9/03/2024 | Burrow system - 3 to 4 smaller holes | -17.87808645 | 122.27529785 |

| Site | Record type | Date | Status / comment | Lat | Long |
|---|---|---|---|---|---|
| Site F | Diggings | 9/03/2024 | conical and plate diggings, and conical under acacia shrubs | -17.8839637833333 | 122.284862633333 |
| Site F | Scat | 9/03/2024 | Plate with scat | -17.8784557666667 | 122.275423683333 |
| Site F | Prints | 9/03/2024 | bilby print over yesterday tyre tracks | -17.8744136166667 | 122.279845433333 |
| Site F | Prints | 9/03/2024 | Tracks | -17.87945568 | 122.28001915 |
| Site F | Prints | 9/03/2024 | fresh tracks and fresh digs | -17.87516347 | 122.27983381 |
| Site F | Prints | 9/03/2024 | Tracks, young | -17.8802902 | 122.28003795 |
| Site F | Burrow | 9/03/2024 | burrow with fresh soil and fresh scratchings and digs along track | -17.8811622833333 | 122.28002455 |
| Site F | Burrow | 9/03/2024 | old burrow in track spoil | -17.8787100166667 | 122.279967333333 |
| Site F | Burrow | 9/03/2024 | Old Bilby burrow | -17.8726205 | 122.279154766667 |
| Site F | Burrow | 9/03/2024 | Old Bilby burrow | -17.8727586833333 | 122.2779672 |
| Site F | Burrow | 9/03/2024 | Recently active burrow | -17.8829452166667 | 122.285545833333 |
| Site F | Burrow | 9/03/2024 | very old burrow | -17.8824770666667 | 122.279742883333 |
| Site F | Burrow | 9/03/2024 | Disused burrow | -17.87163643330 | 122.2821642330 |
| Site F | Burrow | 9/03/2024 | Disused burrow | -17.8726680 | 122.2812340830 |
| Site F | Burrow | 9/03/2024 | Disused burrow | -17.87264380 | 122.2809212170 |
| Site F | Burrow | 10/03/2024 | Old burrow | -17.8841384333333 | 122.282628716667 |
| Site F | Burrow | 10/03/2024 | Old Burrow | -17.8845781166667 | 122.282423416667 |
| Site F | Burrow | 10/03/2024 | Old inactive burrow | -17.8843379166667 | 122.280135566667 |
| Site F | Diggings | 10/03/2024 | digging base of acacia relatively fresh | -17.88475348 | 122.28014025 |
| Site F | Diggings | 10/03/2024 | several possible conical bilby digs at base of pindan acacia | -17.8842916 | 122.2800572 |
| Site F | Diggings | 10/03/2024 | fresh dig | -17.88488206 | 122.2842267 |

**Fauna likelihood of occurrence assessment guidelines**

The Likelihood of occurrence tables presents all significant fauna identified in the desktop assessment as potentially occurring within each of the survey areas. Fauna included are assessed based on previous studies and database searches within a 20-kilometre radius of the survey area.

| Assessment outcome | Description |
|---|---|
| Known | Species recorded during the field survey or from recent, reliable records from within or close proximity to the Survey Area. |
| Likely | Species are **likely** to occur in the Survey Area where there is suitable habitat within the Survey Area and there are recent records of occurrence of the species in close proximity to the Survey Area. OR<br>Species known distribution overlaps with the Survey Area and there is suitable habitat within the Survey Area. |
| Unlikely | Species assessed as **unlikely** include those species previously recorded within 40 km of the Survey Area however:<br>There is limited (i.e. the type, quality and quantity of the habitat is generally poor or restricted) habitat in the Survey Area.<br>The suitable habitat within the Survey Area is isolated from other areas of suitable habitat and the species has no capacity to migrate into the Survey Area. OR<br>Those species that have a known distribution overlapping with the Survey Area however:<br>There is limited habitat in the Survey Area (i.e. the type, quality and quantity of the habitat is generally poor or restricted).<br>The suitable habitat within the Survey Area is isolated from other areas of suitable habitat and the species has no capacity to migrate into the Survey Area. |
| Highly unlikely | Species that are considered highly unlikely to occur in the Survey Area include:<br>Those species that have no suitable habitat within the Survey Area.<br>Those species that have become locally extinct or are not known to have ever been present in the region of the Survey Area. |

**Source information - desktop searches**

NM – *DBCA NatureMap* (accessed February 2024)

PMST – DCCEEW Protected Matters Search Tool (PMST) to identify fauna listed under the EPBC Act potentially occurring within the study area.

DBCA - Purchased DBCA database records

**Fauna likelihood of occurrence assessment – Broome sites**

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey area. Broome Sites F, G, H | | Source |
|---|---|---|---|---|---|---|---|
| | | EP BC Act | BC Act /DBCA | | Pre-site visit | Post-site visit | |
| BIRDS | | | | | | | |
| *Actitis hypoleucos* | Common Sandpiper | MI | MI | The species utilizes a wide range of coastal wetlands and some inland wetlands, with varying levels of salinity, and is mostly found around muddy margins or rocky shores and rarely on mudflats. The Common Sandpiper has been recorded in estuaries and deltas of streams, as well as on banks farther upstream; around lakes, pools, billabongs, reservoirs, dams and claypans, and occasionally piers and jetties. Generally the species forages in shallow water and on bare soft mud at the edges of wetlands; often where obstacles project from substrate, e.g. rocks or mangrove roots. Birds sometimes venture into grassy areas adjoining wetlands (Higgins & Davies 1996). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST, Naturemap |
| *Anas querquedula* | Garganey | MI | MI | Except for a few stragglers, Garganeys are found in Australia as non-breeding migrants to parts of the tropical North of the continent. Information about their whereabouts in the northern interior is scarce. Garganeys have a preference for wetlands around nutrient-rich, shallow fresh water, such as submerged pasture and steppe. In their winter grounds they can form large flocks, but not during the breeding season. | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | DBCA, Naturemap |
| *Anous stolidus* | Common Noddy | MI | MI | The Common Noddy is found in tropical and sub-tropical seas off the west, north and east coasts of Australia, from the Abrolhos Islands in WA to the islands of the Great Barrier Reef in Qld, as well as Norfolk and Lord Howe Islands. Some are seen almost annually in NSW as far south as Sydney. It also ranges across tropical parts of the Pacific, Indian and Atlantic Oceans (DCCEEW 2022). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST, Naturemap , DBCA |
| *Anous tenuirostris melanops* | Australian Lesser Noddy | VU | VU | The Australian subspecies of the Australian lesser noddy *A. t. melanops* breeds only on three islands in the Houtman Abrolhos, off Western Australia, where it nests | Highly unlikely – This species known to occur locally within tidal coastline areas, | Highly unlikely – This species known to occur locally within tidal coastline | PMST |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey area. Broome Sites F, G, H | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-site visit | Post-site visit | |
| | | | | in mangroves. The birds remain near the breeding islands all year (Higgins and Davies 1996). | however the study area lacks suitable habitat (wetlands, dams, shorelines). | areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | |
| *Apus pacificus* | Fork-tailed Swift | MI | MI | The Fork-tailed Swift is common in coastal and sub coastal areas between Carnarvon and Augusta including near and offshore islands. There are scattered records along south coast from Denmark east to Cocklebiddy on the Great Australian Bight, and sparsely scattered records inland. They are found across a range of habitats, from inland open plains to wooded areas. They are most often observed over inland plains in Australia, but sometimes recorded over coastal cliffs and beaches as well as urban areas. They have been recorded well out to sea as well as from offshore islands especially when on passage from Indonesia. This species is almost exclusively aerial (DCCEEW 2022). | Unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Known – recorded during the field survey. | PMST, Naturemap, DBCA |
| *Ardenna pacifica* | Wedge-tailed Shearwater | MI | MI | The Wedge-tailed Shearwater is a pelagic, marine bird known from tropical and subtropical waters. The species tolerates a range of surface-temperatures and salinities but is most abundant where temperatures are greater than 21 °C and salinity is greater than 34.6 %. In tropical zones the species may feed over cool nutrient-rich waters. The species has been recorded in offshore waters of eastern Victoria and southern NSW, mostly over continental slope with sea-surface temperatures of 13.9–24.4 °C (Drummond 1985; Reid et al. 2002) and usually off the continental shelf in north-west Australia (Collins & Jessop 1997; Marchant & Higgins 1990). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Naturemap, DBCA |
| *Ardenna tenuirostris* | Short-tailed Shearwater | MI | MI | During the southern summer Short-tailed Shearwaters are usually found in Australian waters, along the south coast of WA, SA, VIC, NSW and along the east coast as far north as southern QLD. They are endemic breeders that nest mostly on offshore islands in Bass Strait and along the coastline of Tasmania. Short-tailed Shearwaters are found on the open seas, coastal waters and, during their breeding season, on offshore islands. | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat | Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey area. Broome Sites F, G, H | | Source |
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| | | | | | | (wetlands, dams, shorelines). | |
| *Arenaria interpres* | Ruddy Turnstone | MI | MI | In Australia, Ruddy Turnstones are widespread around the coast of the mainland and off-shore islands. They breed on the northern coasts of Europe, Asia and North America. They are found on coastlines around the world, when not breeding or on passage. They are found singly or in small groups along the coastline and only occasionally inland. They are mainly found on exposed rocks or reefs, often with shallow pools, and on beaches. In the north, they are found in a wider range of habitats, including mudflats (DEE 2019b). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | DBCA, Naturemap, PMST |
| *Bulweria bulwerii* | Bulwer's Petrel | MI | MI | The Bulwer's Petrel is mostly a pelagic species, foraging and resting on seas. It is a rare vagrant to the coastline. It is a small dark petrel with a slender body (Morcombe, 2011). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Naturemap, DBCA |
| *Calidris acuminata* | Sharp-tailed Sandpiper | VU | MI | In Australasia, the Sharp-tailed Sandpiper prefers muddy edges of shallow fresh or brackish wetlands, with inundated or emergent sedges, grass, saltmarsh or other low vegetation. This includes lagoons, swamps, lakes and pools near the coast, and dams, waterholes, soaks, bore drains and bore swamps, saltpans and hypersaline saltlakes inland. They also occur in saltworks and sewage farms. They use flooded paddocks, sedgelands and other ephemeral wetlands, but leave when they dry (DCCEEW 2022). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST, Naturemap, DBCA |
| *Calidris alba* | Sanderling | MI | MI | In Australia, the species is almost always found on the coast, mostly on open sandy beaches exposed to open sea-swell, and also on exposed sandbars and spits, and shingle banks, where they forage in the wave-wash zone and amongst rotting seaweed. Sanderlings also occur on beaches that may contain wave-washed rocky outcrops. | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks | DBCA, Naturemap, PMST |

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| | | EP BC Act | BC Act /DBCA | | Pre-site visit | Post-site visit | |
| | | | | Less often the species occurs on more sheltered sandy shorelines of estuaries, inlets and harbours (DEE 2019b). | (wetlands, dams, shorelines). | suitable habitat (wetlands, dams, shorelines). | |
| *Calidris canutus* | Red Knot | VU | VU | In Australasia, the Red Knot mainly inhabits intertidal mudflats, sandflats and sandy beaches of sheltered coasts, in estuaries, bays, inlets, lagoons and harbours; sometimes on sandy ocean beaches or shallow pools on exposed wave-cut rock platforms or coral reefs. They are occasionally seen on terrestrial saline wetlands near the coast, such as lakes, lagoons, pools and pans, and recorded on sewage ponds and saltworks, but rarely use freshwater swamps. They rarely use inland lakes or swamps (DCCEEW 2022).They are found near mudflats and estuaries from Murchison to Bunbury but are then uncommon from Wilson Inlet to Esperance. In the Perth region they are mainly found in Alfred Cove and Peel Inlet (Nevill 2013). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST |
| *Calidris ferruginea* | Curlew Sandpiper | CR | CR | Curlew Sandpipers mainly occur on intertidal mudflats in sheltered coastal areas, such as estuaries, bays, inlets and lagoons, and also around non-tidal swamps, lakes and lagoons near the coast, and ponds in saltworks and sewage farms. They are also recorded inland, though less often, including around ephemeral and permanent lakes, dams, waterholes and bore drains, usually with bare edges of mud or sand. They occur in both fresh and brackish waters. Occasionally they are recorded around floodwaters (DCCEEW 2023). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST, Naturemap, DBCA |
| *Calidris melanotos* | Pectoral Sandpiper | MI | MI | In Australasia, the Pectoral Sandpiper prefers shallow fresh to saline wetlands. The species is found at coastal lagoons, estuaries, bays, swamps, lakes, inundated grasslands, saltmarshes, river pools, creeks, floodplains and artificial wetlands. The species is usually found in coastal or near coastal habitat but occasionally found further inland. It prefers wetlands that have open fringing mudflats and low, emergent or fringing vegetation, such as grass or samphire. The species has also been recorded in swamp overgrown with lignum. They forage in | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST, Naturemap, DBCA |

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| | | | | shallow water or soft mud at the edge of wetlands (Higgins & Davies 1996). | | | |
| *Calidris ruficollis* | Red-necked stint | MI | MI | The Red-necked Stint breeds in north-eastern Siberia and northern and western Alaska. It follows the East Asian-Australasian Flyway to spend the southern summer months in Australia. It is found widely in Australia, except in the arid inland. In Australia, Rednecked Stints are found on the coast, in sheltered inlets, bays, lagoons, estuaries, intertidal mudflats and protected sandy or coralline shores (Pizzey and Knight 2012). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | DBCA, Naturemap, PMST |
| *Calidris subminuta* | Long-toed Stint | MI | MI | In WA the species is found mainly along the coast, with a few scattered inland records. On the south coast the Long-toed Stint is found from Esperance to Albany and inland to Lake Cassencarry and Dumbleyung. On the south-west coast the species is known from the Vasse River estuary, Guraga Lake and the Namming Nature Reserve. The species has occasionally been recorded in the Gascoyne Region, around Lake Wooleen, Meeberrie Station and McNeill Claypan. It is widespread around the Pilbara region and the Kimberley Division between Karratha and Wyndham-Kununurra (DEE 2019b). It occurs in a variety of terrestrial wetlands. They prefer shallow freshwater or brackish wetlands including lakes, swamps, river floodplains, streams, lagoons and sewage ponds. | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | DBCA, Naturemap |
| *Calidris tenuirostris* | Great Knot | VU | MI | The Great Knot has been recorded around the entirety of the Australian coast, with a few scattered records inland. It is now absent from some sites along the south coast where it used to be a regular visitor (Garnett and Crowley 2000). The greatest numbers are found in northern Australia; where the species is common on the coasts of the Pilbara and Kimberley, from the Dampier Archipelago to the Northern Territory border, and in the Northern Territory from Darwin and Melville Island, through Arnhem Land to the south-east Gulf of Carpentaria. In Australasia, the species typically prefers sheltered coastal habitats, | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST, Naturemap, DBCA |

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| | | EP BC Act | BC Act /DBCA | | Pre-site visit | Post-site visit | |
| | | | | with large intertidal mudflats or sandflats. This includes inlets, bays, harbors, estuaries, and lagoons (DEE 2019b). | | | |
| *Calonectris leucomelas* | Streaked Shearwater | MI | MI | The streaked shearwater is a large, pale-faced shearwater that breeds in on islands off the southern Russian Far East, Japan, east China, Korea and Taiwan and migrates in the non breeding season to the waters between Papua New Guinea and Australia. The species rarely ventures south past the Kimberley with scattered records along the Pilbara coast (ALA 2021).It prefers pelagic seas, shelf waters and further out; it is rarely found inshore (Morcombe 2004). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST, Naturemap , DBCA |
| *Cecropis daurica* | Red-rumped Swallow | MI | MI | The Red-rumped Swallow breeds in Europe and Asia and tropical Africa. In Australia the bird is a vagrant to Christmas Island and northern Australia during the nonbreeding season. It occurs in open country, overhead wires, swamps, grasslands and along the coast (Pizzey and Knight 2012). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST, Naturemap , DBCA |
| *Charadrius bicinctus* | Double-banded Plover | MI | MI | The Double-banded Plover breeds only in New Zealand, where it is widespread. In the non-breeding season, part of the population remains in New Zealand, while the remainder migrates to Australia. The Double-banded Plover is found on littoral, estuarine and fresh or saline terrestrial wetlands and also saltmarsh, grasslands and pasture. It occurs on muddy, sandy, shingled or sometimes rocky beaches, bays and inlets, harbours and margins of fresh or saline terrestrial wetlands such as lakes, lagoons and swamps, shallow estuaries and rivers. The species is sometimes associated with coastal lagoons, inland salt lakes and saltworks. It is also found on seagrass beds, which, when exposed at low tide, remain heavily saturated or have numerous water-filled depressions (DEE 2018). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST |

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| *Charadrius dubius* | Little Ringed Plover | MI | MI | While the majority of the population of Little Ringed Plovers will spend the northern winters in Africa, southward of the Sahara desert, a small number will migrate to northern Australia. In Australia they are occasionally found along the coastline, mostly of the northern part of the continent. Outside the breeding season Little Ringed Plovers have a preference for beaches with sand dunes and marshes. They are also regularly found in sewage treatment plants. | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Naturemap, DBCA |
| *Charadrius leschenaultii* | Greater Sand Plover | VU | VU | In Australia, the Greater Sand Plover occurs in coastal areas in all states, though the greatest numbers occur in northern Australia, especially the north-west (Marchant & Higgins 1993). In northern Australia, the species is especially widespread between North West Cape and Roebuck Bay in WA; there are sparsely scattered records from the largely inaccessible area between Roebuck Bay and Darwin, but it often occurs in the Top End of the Northern Territory, including on Groote Eylandt (DCCEEW 2022). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST, Naturemap, DBCA |
| *Charadrius mongolus* | Lesser Sand Plover | EN | EN | Within Australia, the Lesser Sand-Plover is widespread in coastal regions and has been recorded in all states. It mainly occurs in northern and eastern Australia, in southeastern parts of the Gulf of Carpentaria, western Cape York Peninsula and islands in Torres Strait, and along the entire east coast, though it occasionally also occurs inland. It is most numerous in Queensland and NSW. The species has also been recorded on Lord Howe Island, Norfolk Island and Christmas Island, Indian Ocean. In non-breeding grounds in Australia, this species usually occurs in coastal littoral and estuarine environments. It inhabits large intertidal sandflats or mudflats in sheltered bays, harbors and estuaries, and occasionally sandy ocean beaches, coral reefs, wave-cut rock platforms and rocky outcrops. It also sometime occurs in short saltmarsh or among mangroves. The species also inhabits saltworks and near-coastal saltpans, brackish swamps and sandy or silt islands in riverbeds (Marchant & Higgins 1993). In | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST, Naturemap, DBCA |

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| | | EP BC Act | BC Act /DBCA | | Pre-site visit | Post-site visit | |
| | | | | north-western Australia, the species appears to use the Port Hedland saltworks in preference to nearby beaches. | | | |
| *Charadrius veredus* | Oriental Plover | MI | MI | In non-breeding grounds in Australia, this species usually occurs in coastal littoral and estuarine environments. It inhabits large intertidal sandflats or mudflats in sheltered bays, harbours and estuaries, and occasionally sandy ocean beaches, coral reefs, wave-cut rock platforms and rocky outcrops. In north-western Australia, the species appears to use the Port Hedland saltworks in preference to nearby beaches. The species is seldom recorded away from the coast, at margins of lakes, soaks and swamps associated with artesian bores (Marchant & Higgins 1993). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST, Naturemap, DBCA |
| *Chlidonias leucopterus* | White-winged Tern | MI | MI | White-winged Black Terns are non-breeding migrants to Australia from the North. They arrive anywhere along the tropical coast of Australia and disperse around basically the entire Australian seaboard, including the East coast of Tasmania and many small offshore islands. They can be found farther inland, in parts of the Great Dividing Range and in particular in the central part of the Murray-Darling Basin near the NSW/VIC border. There are also White-winged Black Terns in an area around Perth, WA. Elsewhere on the continent White-winged Black Terns are found only rarely, and never in the great deserts of WA/SA/NT or the Nullarbor. White-winged Black Terns live around lakes including ephemeral lakes, in estuaries and in coastal waters. | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Naturemap, DBCA |
| *Cuculus optatus* | Oriental Cuckoo | MI | MI | Non-breeding habitat only: monsoonal rainforest, vine thickets, wet sclerophyll forest or open Casuarina, Acacia or Eucalyptus woodlands. Frequently at edges or ecotones between habitat types. Riparian forest is favoured habitat in the Kimberley region. Typically in denser vegetation with more closed canopy (DCCEEW 2023). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST, Naturemap, DBCA |

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| | | EP BC Act | BC Act /DBCA | | Pre-site visit | Post-site visit | |
| *Elanus scriptus* | Letter-winged Kite | - | P4 | Letter-winged Kites are endemic to Australia. Their core habitat (during the breeding season) is in the semi-arid part of western QLD and the eastern NT, more than 200 km South of the Gulf of Carpentaria, to about Innamincka. Outside the breeding season they disperse in all directions (except the area spanning from Arnhemland in the NT, a fringe of about 200 km width around the Gulf of Carpentaria and all of Cape York peninsula), especially north-eastward to the tropical North of the NT. Given the right conditions (availability of prey, in particular Long-haired Rats) they can disperse further to anywhere else on the continent (but not Tasmania). Letter-winged Kites hunt in a range of habitats, from desert to grassland, and along inland water courses. | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Naturemap, DBCA |
| *Erythrotriorchis radiatus* | Red Goshawk | EN | EN | The Red Goshawk occurs in coastal and sub-coastal areas in wooded and forested lands of tropical and warm-temperate Australia (Marchant & Higgins 1993). Riverine forests are also used frequently. Such habitats typically support high bird numbers and biodiversity, especially medium to large species which the goshawk requires for prey. The Red Goshawk nests in large trees, frequently the tallest and most massive in a tall stand, and nest trees are invariably within 1 km of permanent water (DCCEEW 2023). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST |
| *Chleobia gouldiae* | Gouldian Finch | EN | P4 | The Gouldian Finch inhabits open woodlands that are dominated by Eucalyptus trees and support a ground cover of Sorghum and other grasses (Boekel 1980). The critical components of suitable core habitat for the Gouldian Finch appear to be the presence of favoured annual and perennial grasses (especially Sorghum), a nearby source of surface water and, in the breeding season, unburnt hollow-bearing Eucalyptus trees (especially *E. tintinnans*, *E. brevifolia* and *E. leucophloia*) (Higgins et al. 2006). | Likely – Known to occur locally, may forage on seed of grasses when seasonally suitable within the survey area. The woodland habitat throughout the survey has a paucity of suitable nesting breeding, however my lack nearby water | Likely – Known to occur locally, may forage on seed of grasses when seasonally suitable within the survey area. The woodland habitat throughout the survey has a paucity of suitable nesting breeding, however may lack nearby water | PMST, Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey area. Broome Sites F, G, H | | Source |
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| | | EPBC Act | BC Act /DBCA | | Pre-site visit | Post-site visit | |
| | | | | | sources, therefore maybe seasonal use only. | sources, therefore may be seasonal use only. | |
| *Falco hypoleucos* | Grey Falcon | VU | VU | The Grey Falcon is an Australian endemic, usually confined to the arid inland. It inhabits Triodia grassland, Acacia shrubland, and lightly timbered arid woodland (Morcombe 2004). | Likely – Records of species present in the region, although not commonly observed and habitat not ideally suited. | Likely – Records of species present in the region, although not commonly observed. | PMST, Naturemap, DBCA |
| *Falco peregrinus* | Peregrine Falcon | OS | OS | The Peregrine Falcon is uncommon but wide ranging across Australia. Found everywhere from woodlands to open grasslands and coastal cliffs – though less frequently in desert regions – it feeds almost entirely on other birds. It also eats rabbits and other moderate sized mammals, bats and reptiles. The Peregrine Falcon is very territorial during breeding season, the male courting the female with an impressive display of aerobatics (DEE 2019b, Morcombe 2004). | Likely – Known to occur locally, and the pindan shrubland habitat within the study area represents suitably foraging habitat, although lacks suitable breeding habitat. | Likely – Known to occur locally, and the pindan shrubland habitat within the study area represents suitable foraging habitat, although lacks suitable breeding habitat. | Naturemap, DBCA |
| *Fregata ariel* | Lesser Frigatebird | MI | MI | The Lesser Frigatebird is said to be the most common and widespread frigatebird in Australian seas (DCCEEW 2022). It is common in tropical seas, breeding on remote islands, including Christmas Island in the Indian Ocean in recent years. These birds are most likely to be seen from the mainland prior to the onset of a tropical cyclone, and once this abates they disappear again | Highly unlikely – This species is considered to be mainly pelagic and near-coastal. The survey area lacks suitable habitat. | Highly unlikely – This species is considered to be mainly pelagic and near-coastal. The survey area lacks suitable habitat. | PMST, Naturemap, PMST |
| *Fregata minor* | Great Frigatebird | MI | MI | The great frigatebird is a large seabird in the frigatebird family. There are nesting populations in the tropical Pacific (including the Galapagos Islands) and Indian Oceans, as well as a tiny population in the South Atlantic. The species is a lightly built, large seabird up to 105 cm long with predominantly black plumage. The species exhibits sexual dimorphism; the female is larger than the adult male and has a white throat and breast, and the male's scapular feathers have a purple-green sheen. In the breeding season, the male can distend its striking red gular sac. The species feeds on fish taken in flight from the ocean's | Highly unlikely – This species is considered to be mainly pelagic and near-coastal. The survey area lacks suitable habitat. | Highly unlikely – This species is considered to be mainly pelagic and near-coastal. The survey area lacks suitable habitat. | PMST, Naturemap, DBCA |

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| | | EPBC Act | BC Act /DBCA | | Pre-site visit | Post-site visit | |
| | | | | surface. They feed in pelagic waters within 80 km of their breeding colony or roosting areas (DEE 2018). | | | |
| *Gallinago megala* | Swinhoe's Snipe | MI | MI | During the non-breeding season Swinhoe's Snipe occurs at the edges of wetlands, such as wet paddy fields, swamps, and freshwater streams. The species is also known to occur in grasslands, drier cultivated areas (including crops of rapeseed and wheat) and market gardens (Higgins & Davies 1996). Habitat specific to Australia includes the dense clumps of grass and rushes round the edges of fresh and brackish wetlands. This includes swamps, billabongs, river pools, small streams and sewage ponds. They are also found in drying claypans and inundated plains pitted with crab holes (Higgins & Davies 1996). | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST, Naturemap, DBCA |
| *Gallinago stenura* | Pin-tailed Snipe | MI | MI | In WA the species was reported at Pilbara, Port Headland, Myaree Pool, Maitland River and near Karratha. During non-breeding period the Pin-tailed Snipe occurs most often in or at the edges of shallow freshwater swamps, ponds and lakes with emergent, sparse to dense cover of grass/sedge or other vegetation (DEE 2019b). | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST, Naturemap, DBCA |
| *Gelochelidon nilotica* | Gull-billed Tern | MI | MI | The Gull-billed Tern is nomadic or migratory species in Australia. Gull-billed Terns are found in freshwater swamps, brackish and salt lakes, beaches and estuarine mudflats, floodwaters, sewage farms, irrigated croplands and grasslands, where resources are favourable. They are only rarely found over the ocean. The Gull-billed Tern. Although essentially an inland species, outside breeding season it shows a distinct preference for saltmarshes and lagoons near the coast. Movements are not fully understood but it is common and widespread in Australia (Morcombe 2004). | Highly unlikely – This species is not known to occur locally. The study area lacks suitable coastal habitat. | Highly unlikely – This species is not known to occur locally. The study area lacks suitable coastal habitat. | Naturemap, DBCA |
| *Glareola maldivarum* | Oriental Platincole | MI | MI | Non-breeding habitat only: monsoonal rainforest, vine thickets, wet sclerophyll forest or open Casuarina, Acacia or Eucalyptus woodlands. Frequently at edges or | Unlikely – This species is known to occur locally, however the | Unlikely – This species is known to occur locally, | PMST, Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey area. Broome Sites F, G, H | | Source |
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| | | EP BC Act | BC Act /DBCA | | Pre-site visit | Post-site visit | |
| | | | | ecotones between habitat types. Riparian forest is favoured habitat in the Kimberley region. Typically in denser vegetation with more closed canopy (DCCEEW 2023). | survey area lacks suitable habitat such as open plains or clearings, wetlands of coastal shorelines. | however the survey area lacks suitable habitat such as open plains or clearings, wetlands of coastal shorelines. | |
| *Hirundapus caudacutus* | White-throated Needletail | MI | MI | White-throated Needletails, race "caudacutus", are non-breeding migrants to Australia from North Asia. They usually come across the Torres Strait, populating the East coast of the continent plus Bass Strait and Tasmania. They can be found in a stretch about half the east-west width of QLD and NSW and all of VIC. In some years they can venture further inland, into the Top End of the NT and out into the Coral Sea. In such years they can also reach south-eastern SA, up to about Eyre peninsula. White-throated Needletails are mostly observed above forested areas, often in hilly and mountainous terrain, but they are occasionally also found above more open country. | Highly unlikely. This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely. This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Naturemap, DBCA |
| *Hirundo rustica* | Barn Swallow | MI | MI | In Australia, the Barn Swallow is recorded in open country in coastal lowlands, often near water, towns and cities. Birds are often sighted perched on overhead wires, and also in or over freshwater wetlands, paperbark Melaleuca woodland, mesophyll shrub thickets and tussock grassland (DEE 2019). | Unlikely – This species is known to occur locally. The shrubland plains within the survey area represent suitable foraging habitat however the species is an opportunistic vagrant with use occasional or on a seasonal basis. | Unlikely – This species is known to occur locally. The shrubland plains within the survey area represent suitable foraging habitat however the species is an opportunistic vagrant with use occasional or on a seasonal basis. | PMST, Naturemap, DBCA |
| *Hydroprogne caspia* | Caspian Tern | MI | MI | The Caspian Tern is mostly found in sheltered coastal embayments (harbours, lagoons, inlets, bays, estuaries and river deltas) and those with sandy or muddy margins are preferred. They also occur on near-coastal or inland terrestrial wetlands that are either fresh or saline, | Highly unlikely – This species is not known to occur locally. The study | Highly unlikely – This species is not known to occur locally. The study | Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey area. Broome Sites F, G, H | | Source |
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| | | EP BC Act | BC Act /DBCA | | Pre-site visit | Post-site visit | |
| | | | | especially lakes (including ephemeral lakes), waterholes, reservoirs, rivers and creeks. They also use artificial wetlands, including reservoirs, sewage ponds and saltworks. In offshore areas the species prefers sheltered situations, particularly near islands, and is rarely seen beyond reefs (DEE 2019b). | area lacks suitable coastal habitat. | area lacks suitable coastal habitat. | |
| *Ixobrychus dubius* | Black-backed Bittern | - | P4 | In Australia, Australian Little Bitterns are found mostly in the lower Murray-Darling Basin (especially along the Murray River), but occasionally also elsewhere in the Murray-Darling Basin, up to south-eastern QLD. Occasionally they are also found in the Great Dividing Range and along the South and East coast of the continent, from about Cairns, QLD, in the North to about Adelaide, SA, in the South. There is also a small population on the south-western tip of WA, including Perth, and there are some reports of vagrants in various locations along the continent's North coast. Australian Little Bitterns are usually found in freshwater habitats, mostly in reeds around freshwater lakes, but also in reedbeds and other dense vegetation along creeks and in swamps. Sometimes they are also found in wetlands with brackish and saline water. | Highly unlikely. This species is not known to occur locally. The study area lacks suitable coastal habitat. | Highly unlikely. This species is not known to occur locally. The study area lacks suitable coastal habitat. | Naturemap, DBCA |
| *Limicola falcinellus* | Broad-billed Sandpiper | MI | MI | In WA, few records occur in the south-west, but the Broad-billed Sandpiper may be regular in small numbers at scattered locations, from Warden Lake Nature Reserve and Coramup Creek to Guraga Lake Nature Reserve and Hurstview Lake. They mostly occur on the coasts of the Pilbara and Kimberley between Onslow and Broome but are also recorded north to the mouth of Lawley River, and inland at Lake Daley. In the Northern Territory, they are an irregular and uncommon visitor near Darwin, though previously considered common at times. | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST, Naturemap, DBCA |
| *Limnodromus semipalmatus* | Asian Dowitcher | VU | MI | The Asian Dowitcher occurs in sheltered coastal Environments, such as embayments, coastal lagoons, estuaries and tidal creeks. They are known to frequent shallow water and exposed mudflats or sandflats. In Australia the Port Hedland Saltworks provides crucial habitat for the species. The species is commonly found in | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks | PMST, Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey area. Broome Sites F, G, H | | Source |
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| | | EP BC Act | BC Act /DBCA | | Pre-site visit | Post-site visit | |
| | | | | the round ponds and channels of saltworks and sewage farms. It is also found at near-coastal swamps and lakes (Higgins & Davies 1996). | (wetlands, dams, shorelines). | suitable habitat (wetlands, dams, shorelines). | |
| *Limosa lapponica* | Bar-tailed Godwit | MI | MI | Bar-tailed Godwits arrive in Australia each year in August from breeding grounds in the northern hemisphere. Birds are more numerous in northern Australia Bar-tailed Godwits inhabit estuarine mudflats, beaches and mangroves. They are common in coastal areas around Australia. They are social birds and are often seen in large flocks and in the company of other waders (Birdlife Australia 2019). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST, Naturemap, DBCA |
| *Limosa lapponica menzbieri* | Northern Siberian Bar-tailed Godwit | EN | CR | The bar-tailed godwit (all subspecies combined) has an extremely large global range. For the species, the global extent of occurrence is estimated to be 1,470,000 km2 (BirdLife International 2015). The subspecies L. l. menzbieri breeds in northern Siberia, Russia between the Khatanga River and the delta of the Kolyma River (Higgins & Davies 1996). This subspecies spends the nonbreeding period mostly in the north of Western Australia, but also in south-east Asia (Bamford et al. 2008). Migrating birds stage for over one month during both southwards and northwards migration in western and northern parts of the Yellow Sea (Leyrer et al. 2014). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST, Naturemap, DBCA |
| *Limosa limosa* | Black-tailed Godwit | EN | MI | In Australia the Black-tailed Godwit has a primarily coastal habitat environment. The species is commonly found in sheltered bays, estuaries and lagoons with large<br>intertidal mudflats or sandflats, or spits and banks of mud, sand or shell-grit; occasionally recorded on rocky coasts or coral islets. The use of habitat often depends on the stage of the tide. It is also found in shallow and sparsely vegetated, near coastal, wetlands; such as saltmarsh, salt flats, river pools, swamps, lagoons and<br>floodplains. There are a few inland records, around shallow, freshwater and saline lakes, swamps, dams and bore-overflows. They also use lagoons in sewage farms and saltworks (Higgins & Davies 1996). | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST, Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey area. Broome Sites F, G, H | | Source |
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| *Macronectes halli* | Northern Giant Petrel | MI | MI | The range of the Northern Giant-Petrel is circumpolar, encompassing all southern oceans and coastal waters around the southern continents. Northern Giant-Petrels reach the Australian coastline anywhere up to a few hundred km South of the tropic of Capricorn on both the East coast and the West coast. Northern Giant-Petrels breed on numerous offshore islands. | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Naturemap, DBCA |
| *Motacilla cinerea* | Grey Wagtail | MI | MI | European and Asian species. Migrates in winter south to Indonesia and New Guinea. Rarely reaches Australia. Occurs usually near fresh streams, but also on mown grass, ploughed land or near sewerage ponds. | Unlikely – The study area is located beyond the known distribution of this species although it may occur as a vagrant occasionally. | Unlikely – The study area is located beyond the known distribution of this species although it may occur as a vagrant occasionally. | PMST, Naturemap, DBCA |
| *Motacilla flava* | Yellow Wagtail | MI | MI | Occurs in open country near swamps, salt marshes, sewerage ponds, grassed surrounds to airfields, bare ground; occasionally on drier inland plains. Roosts in mangroves and other dense vegetation. Rare but regular visitor around Australia coast, especially the NW coast, Broome to Darwin (Morcombe 2004). | Unlikely – The study area is located beyond the known distribution of this species although it may occur as a vagrant occasionally. | Unlikely – The study area is located beyond the known distribution of this species although it may occur as a vagrant occasionally. | PMST, Naturemap, DBCA |
| *Ninox connivens* subsp. *connivens* | Barking Owl | - | P3 | Coastal and subcoastal districts almost right around Australia but distribution is very uneven and broken. Barking Owls are generally more common in northern Australia. Ideal habitat is open country with a choice of large trees for roosting and nesting. In southern districts, Barking Owls choose creeks and rivers, particularly with River Red Gums, isolated stands of trees and open woodland. In northern Australia they favour paperbark swamps as well as previous habitats. Although they are generally wary at their nest, they may become very accustomed to humans, nesting close to farm buildings | Highly unlikely – This subspecies of Barking Owl is not known to occur the Dampierland Region. | Highly unlikely – This subspecies of Barking Owl is not known to occur the Dampierland Region. | Naturemap, DBCA |

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| | | EP BC Act | BC Act /DBCA | | Pre-site visit | Post-site visit | |
| | | | | and even in streets in towns. They have a distinct preference to be close to water (DEE 2019b). | | | |
| *Numenius madagascariensis* | Eastern Curlew | CR | CR | The Eastern Curlew is most commonly associated with sheltered coasts, especially estuaries, bays, harbours, inlets and coastal lagoons, with large intertidal mudflats or sandflats, often with beds of seagrass. Occasionally, the species occurs on ocean beaches (often near estuaries), and coral reefs, rock platforms, or rocky islets. The birds are often recorded among saltmarsh and on mudflats fringed by mangroves, sometimes within the mangroves, and in coastal saltworks and sewage farms. In the south west, Eastern Curlews are recorded from Eyre, and there are scattered records from Stokes Inlet to Peel Inlet (Marchant & Higgins 1993). They are uncommon further south of Geraldton, but can be spotted in Alfred Cove, Peel Inlet and the Albany region (Nevill 2013). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST, Naturemap, DBCA |
| *Numenius minutus* | Little Curlew | MI | MI | Little Curlews generally spend the non-breeding season in northern Australia from Port Hedland in WA to the Queensland coast (Minton 2002 pers. comm.). There are records of the species from inland Australia, and widespread but scattered records on the east coast. The Little Curlew is most often found feeding in short, dry grassland and sedgeland, including dry floodplains and blacksoil plains, which have scattered, shallow freshwater pools or areas seasonally inundated. Open woodlands with a grassy or burnt understory, dry saltmarshes, coastal swamps, mudflats or sandflats of estuaries or beaches on sheltered coasts, mown lawns,<br>gardens, recreational areas, ovals, racecourses and verges of roads and airstrips are also used (Higgins & Davies 1996). | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST, Naturemap, DBCA |
| *Numenius phaeopus* | Whimbrel | MI | MI | The Whimbrel is often found on the intertidal mudflats of sheltered coasts. It is also found in harbours, lagoons, estuaries and river deltas, often those with mangroves, but also open, un-vegetated mudflats. It is occasionally found on sandy or rocky beaches, on coral or rocky islets, or on intertidal reefs and platforms. It has been infrequently recorded using saline or brackish lakes near | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study area lacks suitable | PMST, DBCA, Naturemap |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey area. Broome Sites F, G, H | | Source |
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| | | EP BC Act | BC Act /DBCA | | Pre-site visit | Post-site visit | |
| | | | | coastal areas. It also used salt flats with saltmarsh, or saline grasslands with standing water left after high spring-tides, and in similar habitats in sewage farms and salt fields (Higgins & Davies 1996). There are a small number of inland records from saline lakes and cane grass swamps. It has also been recorded in coastal dunes and a football field. | (wetlands, dams, shorelines). | habitat (wetlands, dams, shorelines). | |
| *Oceanites oceanicus* | Wilson's Storm Petrel | MI | MI | Wilson's Storm-Petrel spends much of its life at sea (Marchant & Higgins 1990). On migration in the Indian and Pacific Oceans, the species remains far out to sea; although first-year birds may follow the coasts of southern continents. Birds often congregate and feed at ocean fronts, and are occasionally sighted inshore (Marchant & Higgins 1990). In south-east Australia, Wilson's Storm-Petrels are found over waters of surface temperatures between 9.4–22.0 °C (Reid et al. 2002). | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Naturemap, DBCA |
| *Onychoprion anaethetus* | Bridled Tern | MI | MI | The species forages in offshore, continental shelf waters and is only rarely recorded along mainland coasts, even those adjacent or close to breeding colonies (though note breeding on mainland in Western Australia just mentioned). At least, the southern populations migrate north after breeding. The species is a vagrant to southern and south-eastern Australian waters outside the breeding range (Barrett et al. 2003; Blakers et al. 1984; Bonnin 1968, 1969, 1982; Higgins & Davies 1996; Hulsman & Langham 1985; Johnstone & Storr 1998).<br>In Western Australia, breeding is widespread from islands off Cape Leeuwin (extending round the southern coast to Seal Rocks) north to Shark Bay and in Pilbara region and Kimberley Division. At sea, distribution extends from Cape Leeuwin north to Dirk Hartog Island, with isolated mainland coastal records at Point Maud and Ningaloo, and from Barrow Island to the Dampier Archipelago, and at sea off the Kimberley coast from waters west of the Dampier Peninsula to Ashmore Reef and Joseph Bonaparte Gulf (Barrett et al. 2003; Blakers et al. 1984; Higgins & Davies 1996; Johnstone & Storr 1998). In the Northern Territory, most breeding colonies are in the | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Naturemap, DBCA |

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| | | EP BC Act | BC Act /DBCA | | Pre-site visit | Post-site visit | |
| | | | | eastern portion of the territory, with main colonies being off north-eastern Arnhem Land, and on south-eastern Groote Eylandt and the Sir Edward Pellew Group. | | | |
| *Pandion haliaetus* | Osprey | MI | MI | The breeding range of the Osprey extends around the northern coast of Australia (including many offshore islands) from Albany in WA to Lake Macquarie in NSW; with a second isolated breeding population on the coast of South Australia, extending from Head of Bight east to Cape Spencer and Kangaroo Island. Eastern Ospreys occur in littoral and coastal habitats and terrestrial wetlands of tropical and temperate Australia and offshore islands (DCCEEW 2022). | Likely – species has previously been recorded in the survey area occupying a nest. | Likely – species has previously been recorded in the nearby area occupying a nest. | PMST, Naturemap , DBCA |
| *Papasula abbotti* | Abbot's Booby | EN | EN | Currently, Abbott's Booby is only known to breed on Christmas Island and to forage in the waters surrounding the island Within Christmas Island, most nests are found in the tall plateau forest on the central and western areas of the island, and in the upper terrace forest of the northern coast. The species was once thought to be restricted to areas above 150 m, mostly on the sides of north-west facing slopes but a survey in 1991 located them in some new areas Some of these areas had been known but were not recorded in a 1981 survey This revised distribution would be due partly to movement of the birds but the survey also discovered previously unknown nesting areas (DCCEEW 2022). | Highly unlikely. This species is known to occur locally coastline areas, however the study area lacks suitable habitat. | Highly unlikely. This species is known to occur locally coastline areas, however the study area lacks suitable habitat. | PMST |
| *Pezoporus occidentalis* | Night Parrot | EN | EN | Night Parrots usually inhabit arid or semi-arid grasslands that are dominated by spinifex, though they have also been recorded in shrublands dominated by samphire, bluebush and saltbush (Morcombe 2006). | Highly unlikely. There have been few recordings of the species in the region, and the site habitat is not suitable. | Highly unlikely. There have been few recordings of the species in the region, and the site habitat is not suitable. | PMST |
| *Phaethon lepturus* | White-tailed Tropicbird | MI | MI | The species is primarily oceanic in tropical waters, rarely inshore, and only is near land when breeding. Nests are located on islands and atolls utilising a variety of habitats from closed canopy rainforest to bare sandy ground and rugged rocky terrain (Commonwealth of Australia, 2020). | Highly unlikely.<br>This species is known to occur locally coastline areas, | Highly unlikely.<br>This species is known to occur locally coastline areas, however the | PMST |

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| | | EP BC Act | BC Act /DBCA | | Pre-site visit | Post-site visit | |
| | | | | | however the study area lacks suitable habitat. | study area lacks suitable habitat. | |
| *Phaethon rubricauda westralis* | Red-tailed Tropicbird | EN | EN | In Australia, it nests on Queensland's coral islands (including Raine Island and Lady Elliot Island), and Ashmore Reef and Rottnest Island off Western Australia, as well as Sugarloaf Rock at Cape Naturaliste and Busselton on the Western Australian coastline itself, and the offshore territories of the Cocos (Keeling) Islands, Norfolk and Lord Howe islands. In New Zealand territory it breeds on the Kermadec Islands. It frequents areas of ocean with water temperatures from 24 to 30 °C (75 to 86 °F) and salinity under 35% in the southern hemisphere and 33.5% in the northern hemisphere. In the Pacific Ocean, the southern boundary of its range runs along the 22 °C (72 °F) summer surface isotherm The warm waters of the Leeuwin Current facilitate the species nesting at Cape Leeuwin in southwestern Australia, yet is only a rare visitor to New South Wales at corresponding latitudes on the Australian east coast (Higgens et al 1990). | Highly unlikely.<br>This species is known to occur locally coastline areas, however the study area lacks suitable habitat. | Highly unlikely.<br>This species is known to occur locally coastline areas, however the study area lacks suitable habitat. | PMST |
| *Phalaropus lobatus* | Red-necked Pharalope | MI | MI | During non-breeding period the Red-necked Phalarope occurs mainly at sea. In Australia it is recorded at both inland and coastal lakes/swamps, including highly saline waters and artificial wetlands notably saltfields (Higgins & Davies 1996). | Highly unlikely.<br>This species is known to occur locally coastline areas, however the survey area lacks suitable habitat. | Highly unlikely.<br>This species is known to occur locally coastline areas, however the survey area lacks suitable habitat. | Naturemap, DBCA |
| *Philomachus pugnax* | Ruff | MI | MI | In Australia the Ruff is found on generally fresh, brackish of saline wetlands with exposed mudflats at the edges. It is found in terrestrial wetlands including lakes, swamps, pools, lagoons, tidal rivers, swampy fields and floodlands. They are occasionally seen on sheltered coasts, in harbours, estuaries, seashores and are known to visit sewage farms and saltworks. They are sometimes found on wetlands surrounded by dense vegetation including grass, sedges, saltmarsh and reeds. They have been observed on sand spits and other sandy habitats including shingles. The Ruff forages on exposed mudflats, in shallow water and occasionally on dry mud. They have | Highly unlikely - This species is known to occur locally coastline areas, however the study area lacks suitable habitat. | Highly unlikely - This species is known to occur locally coastline areas, however the study area lacks suitable habitat. | Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey area. Broome Sites F, G, H | | Source |
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| | | EP BC Act | BC Act /DBCA | | Pre-site visit | Post-site visit | |
| | | | | been observed foraging in dry waterside plants and in swampy areas next to aeration tanks in sewage farms. They prefer to roost amongst shorter vegetation (Higgins & Davies 1996). | | | |
| *Plegadis falcinellus* | Glossy Ibis | MI | MI | The Glossy Ibis' preferred habitat for foraging and breeding are freshwater marshes at the edges of lakes and rivers, lagoons, flood-plains, wet meadows, swamps, reservoirs, sewage ponds, rice-fields and cultivated areas under irrigation. The species is occasionally found in coastal locations such as estuaries, deltas, saltmarshes, and coastal lagoons. Within Australia, the largest contiguous areas of prime habitat are in inland and northern floodplain areas (Marchant and Higgins 1990). | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the survey area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the survey area lacks suitable habitat (wetlands, dams, shorelines). | Naturemap, DBCA |
| *Pluvialis fulva* | Pacific Golden Plover | MI | MI | The Pacific Golden Plover breeds on the Arctic tundra in western Alaska. It winters in South America and islands of the Pacific Ocean to India, Indonesia and Australia. In Australia it is widespread along the coastline. Pacific Golden Plovers usually occur on beaches, mudflats and sandflats (sometimes in vegetation such as mangroves, low saltmarsh such as Sarcocornia, or beds of seagrass) in sheltered areas including harbours, estuaries and lagoons, and also in evaporation ponds in saltworks. The species is also sometimes recorded on islands, sand and coral cays and exposed reefs and rocks (DEE 2019b) | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the survey area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the survey area lacks suitable habitat (wetlands, dams, shorelines). | PMST, Naturemap, DBCA |
| *Pluvialis squatarola* | Grey Plover | VU | MI | The Grey Plover breeds around the Arctic regions and migrates to the southern hemisphere, being a regular summer migrant to Australia, mostly to the west and south coasts. It is generally sparse but not uncommon in some areas. It is occasionally found inland. It is almost entirely coastal, being found mainly on marine shores, inlets, estuaries and lagoons with large tidal mudflats or sandflats for feeding, sandy beaches for roosting, and also on rocky coasts (Birdlife Australia 2019). | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the survey area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST, Naturemap, DBCA |
| *Polytelis alexandrae* | Princess Parrot | VU | P4 | The Princess Parrot is confined to arid regions of Western Australia, the Northern Territory, and South Australia. The Princess Parrot inhabits sand dunes and sand flats in the arid zone of western and central Australia. It occurs in | Unlikely – The study area is located beyond the known distribution of this species although | Unlikely – The study area is located beyond the known distribution of this | PMST, Naturemap, DBCA |

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| | | | | open savannah woodlands and shrublands that usually consist of scattered stands of Eucalyptus (including *E. gongylocarpa, E. chippendalei* and mallee species), *Casuarina* or *Allocasuarina* trees; an understorey of shrubs such as *Acacia* (especially *A. aneura*), *Cassia*, *Eremophila*, *Grevillea*, *Hakea* and *Senna*; and a ground cover dominated by *Triodia* species. It also frequents *Eucalyptus* or *Allocasuarina* trees in riverine or littoral areas (DCCEEW 2023). | it may occur as a vagrant occasionally. | species although it may occur as a vagrant occasionally. | |
| *Puffinus huttoni* | Hutton's Shearwater | EN | EN | Hutton's Shearwaters are non-breeding visitors to the waters around the entire Australian continent and Tasmania. They are most frequenly found along the South-east coast of the continent, around Tasmania, and along the South coast (the Great Australian Bight), but they are also regularly spotted off the southern half of QLD, in the Coral Sea, and along the coastlines of WA and the Top End of the NT. Elsewhere they are spotted less regularly. They do NOT enter the Gulf of Carpentaria. Hutton's Shearwaters are pelagic birds that spend most of their time out on the open ocean and in coastal waters. | Highly unlikely.<br>This species is known to occur locally coastline areas, however the study area lacks suitable habitat. | Highly unlikely.<br>This species is known to occur locally coastline areas, however the study area lacks suitable habitat. | Naturemap, DBCA |
| *Rostratula australis* | Australian Painted Snipe | EN | EN | The Australian Painted Snipe is restricted to Australia with historical records from around the Perth region in Western Australia. Prefers fringes of swamps, dams and nearby marshy areas where there is a cover of grasses, lignum, low scrub or open timber nests on the ground amongst tall vegetation, such as grasses, tussocks or reeds. The nest consists of a scrape in the ground, lined with grasses and leaves. Breeding is often in response to local conditions; generally occurs from September to December. Incubation and care of young is all undertaken by the male only. Forages nocturnally on mud-flats and in shallow water. Feeds on worms, molluscs, insects and some plant-matter (DCCEEW 2023). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST, Naturemap, DBCA |
| *Stercorarius parasiticus* | Arctic Skua | MI | MI | Artic Skua are a strongly migratory pelagic species. In Australia Artic Skua are found around the entire coastline, arriving on their migration mostly along the far east-Asian coasts from the North. Sightings along the northern | Highly unlikely.<br>This species is known to occur locally | Highly unlikely.<br>This species is known to occur | DBCA, Naturemap |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey area. Broome Sites F, G, H | | Source |
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| | | EP BC Act | BC Act /DBCA | | Pre-site visit | Post-site visit | |
| | | | | Australian coastline from the Top End of the NT to the coast of northern WA are rare. They will come close enough to the coastline to be observable from the shore.<br>While nesting on arctic tundra and islands, they spend most of the rest of the year on the high seas. They will also occasionally enter coastal waters, in rare cases even coastal wetlands. | coastline areas, however the study area lacks suitable habitat. | locally coastline areas, however the study area lacks suitable habitat. | |
| *Sterna dougallii* | Roseate Tern | MI | MI | The Roseate Tern occurs in coastal and marine areas in subtropical and tropical seas. The species inhabits rocky and sandy beaches, coral reefs, sand cays and offshore islands. Birds rarely occur in inshore waters or near the mainland, usually venturing into these areas only accidentally, when nesting islands are nearby (Higgins & Davies 1996). | Highly unlikely<br>This species is known to occur locally coastline areas, however the study area lacks suitable habitat. | Highly unlikely<br>This species is known to occur locally coastline areas, however the study area lacks suitable habitat. | Naturemap, DBCA |
| *Sterna hirundo* | Common Tern | MI | MI | Common Terns are marine, pelagic, and coastal. In Australia, they are recorded in all marine zones, but are commonly observed in near-coastal waters, both on ocean beaches, platforms, and headlands and in sheltered waters, such as bays, harbours, and estuaries with muddy, sandy or rocky shores. However, off Wollongong, NSW, Common Terns were recorded in all marine zones but generally recorded in offshore and pelagic waters, 11–55 km from shore. Occasionally they are recorded in coastal and near-coastal wetlands, either saline or freshwater, including lagoons, rivers, lakes, swamps and saltworks. Sometimes they occur in mangroves or saltmarsh and, in bad weather, in coastal sand-dunes or coastal embayments (Brandis et al. 1992; Chatto 2006; Higgins & Davies 1996; Hitchcock 1965; Morris 1989; Morris et al. 1981, 1990; Wood 1991). | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Naturemap, DBCA |
| *Sternula albifrons* | Little Tern | MI | MI | In Australia, Little Terns inhabit sheltered coastal environments, including lagoons, estuaries, river mouths and deltas, lakes, bays, harbours and inlets, especially those with exposed sandbanks or sand-spits, and also on exposed ocean beaches (DCCEEW 2022). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks | PMST, Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey area. Broome Sites F, G, H | | Source |
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| | | EP BC Act | BC Act /DBCA | | Pre-site visit | Post-site visit | |
| | | | | | (wetlands, dams, shorelines). | suitable habitat (wetlands, dams, shorelines). | |
| *Sula leucogaster* | Brown Booby | MI | MI | In Australia, the Brown Booby is found from Bedout Island in WA, around the coast of the Northern Territory to the Bunker Group of islands in Queensland with occasional reports further south in New South Wales and Victoria. The species is reported further south to Tweed Heads, NSW, and to near Onslow, WA and may be becoming more common in these areas. The Brown Booby uses both marine and terrestrial habitat. The species occurs in, but is not restricted to, tropical waters of all major oceans, often staying close to breeding islands (DEE 2019b). | Highly unlikely – The study area lacks suitable deep-water habitat. | Highly unlikely – The study area lacks suitable deep-water habitat. | Naturemap, DBCA |
| *Thalasseus bergii* | Greater Crested Tern | MI | MI | Crested Terns occur singularly or in flocks in coastal areas, estuaries, inlets, islands and occasionally on large inland lakes or rivers. They are often seen perching with gulls on beaches, sand spits or jetties. Crested Terns are widespread from the south coast of Africa north to Asia, south to Australia and east to Polynesia. They also occur on many islands in the Indian and Pacific Oceans (DEE 2018). | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Naturemap, DBCA |
| *Tringa brevipes* | Grey-tailed Tattler | MI | P4 | Within Australia, the Grey-tailed Tattler has a primarily northern coastal distribution and is found in most coastal regions (Higgins & Davies 1996). The Grey-tailed Tattler is often found on sheltered coasts with reefs and rock platforms or with intertidal mudflats. It can also be found at intertidal rocky, coral or stony reefs as well as platforms and islets that are exposed at low tide (DEE 2018). | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST, Naturemap, DBCA |
| *Tringa glareola* | Wood Sandpiper | MI | MI | The Wood Sandpiper uses well-vegetated, shallow, freshwater wetlands, such as swamps, billabongs, lakes, pools and waterholes. Wood Sandpipers are more numerous in the north than the south of Australia and are also found in New Guinea, Africa, the Indian subcontinent and South-east Asia. They breed widely across the north | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat | Highly unlikely – This species is known to occur locally within tidal coastline areas, however the study | PMST, Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey area. Broome Sites F, G, H | | Source |
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| | | EP BC Act | BC Act /DBCA | | Pre-site visit | Post-site visit | |
| | | | | of Europe and Asia, mostly in Scandinavia, Baltic countries and Russia. They are the most abundant migratory wader in non-coastal areas of Asia (DEE 2019b). Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | (wetlands, dams, shorelines). | area lacks suitable habitat (wetlands, dams, shorelines). | |
| *Tringa nebularia* | Common Greenshank | EN | MI | The Common Greenshank is a heavily built, elegant wader, 30–35 cm in length, with a wingspan of 55–65 cm and weight up to 190 g for both males and females. The bill is long and slightly upturned and the legs are long and yellowish-green. In flight, all plumages show uniformly dark upperwing and constrasting white rump extending in a white wedge up the back, whitish tail and tips of toes projecting slightly beyond the tip of the tail. The sexes are alike (Higgins & Davies 1996).<br>The species is seen singly or in small to large flocks (sometimes hundreds) in a variety of coastal and inland wetlands. The Common Greenshank does not breed in Australia, however, the species occurs in all types of wetlands and has the widest distribution of any shorebird in Australia (Higgins & Davies 1996). It occurs around most of the coast from Cape Arid in the south to Carnarvon in the north-west. In the Kimberleys it is recorded in the south-west and the north-east, with isolated records from the Bonaparte Archipelago (Higgins & Davies 1996). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species known to occur locally within tidal coastline areas, however the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST, Naturemap, DBCA |
| *Tringa stagnatilis* | Marsh Sandpiper | MI | MI | The Marsh Sandpiper lives in permanent or ephemeral wetlands of varying salinity, including swamps, lagoons, billabongs, saltpans, saltmarshes, estuaries, pools on inundated floodplains, and intertidal mudflats and also regularly at sewage farms and saltworks. They are recorded less often at reservoirs, waterholes, soaks, bore-drain swamps and flooded inland lakes. In north Australia they prefer intertidal mudflats (Higgins & Davies | Highly unlikely – This species is known to occur locally within tidal coastline areas; however, the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species is known to occur locally within tidal coastline areas; however, the study area lacks suitable | PMST, Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey area. Broome Sites F, G, H | | Source |
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| | | EPBC Act | BC Act /DBCA | | Pre-site visit | Post-site visit | |
| | | | | 1996), although surveys in Kakadu National Park recorded more birds around shallow freshwater lakes than in areas influenced by tide. At the Top End they often use ephemeral pools on inundated freshwater and tidal floodplains (Higgins & Davies 1996). They are found infrequently around mangroves (Higgins & Davies 1996). | | habitat (wetlands, dams, shorelines). | |
| *Tringa totanus* | Common Redshank | MI | MI | In Australia, the Common Redshank has been recorded at scattered locations. In WA the species is vagrant to the south-west with records at Peel Inlet, Coodanup, the Gascoyne region, Coral Bay and Carnarvon (Higgins & Davis 1996). It is regular and widespread in the northwest, from the Dampier Salt fields to Roebuck Bay and Broome. The Common Redshank is found at sheltered coastal wetlands such as bays, river estuaries, lagoons, inlets and saltmarsh (with bare open flats and banks of mud or sand). They are also found around salt lakes, freshwater lagoons, artificial wetlands and saltworks and sewage farms (Higgins & Davies 1996). | Highly unlikely – This species is known to occur locally within tidal coastline areas; however, the study area lacks suitable habitat (wetlands, dams, shorelines). | Highly unlikely – This species is known to occur locally within tidal coastline areas; however, the study area lacks suitable habitat (wetlands, dams, shorelines). | PMST, Naturemap, DBCA |
| *Tyto novaehollandiae kimberli* | Masked Owl (northern) | VU | P3 | The range of the Masked Owl is a broad coastal band around most of mainland Australia and throughout Tasmania, and for the most part is less than 300 km from the coast. Population numbers are low on the mainland and several states give this species special conservation status. The Masked Owl inhabits heavy forests, and will hunt over open woodlands, timbered waterways and open country on the fringe of these areas. The main requirements are tall trees with suitable hollows for nesting and roosting and adjacent areas for foraging. Masked Owls are territorial, and pairs remain in or near the territory all year round (Birdlife Australia 2019). | Unlikely – This species prefers heavily timbered forests and tall woodlands for nesting. The study area does not support suitable habitat. However, it may hunt over the survey area on an occasional basis. | Unlikely – This species prefers heavily timbered forests and tall woodlands for nesting. The study area does not support suitable habitat. However, it may hunt over the survey area on an occasional basis. | PMST, Naturemap, DBCA |
| *Xenus cinereus* | Terek Sandpiper | VU | MI | In Australia, the Terek Sandpiper has a primarily coastal distribution, with occasional records inland. It is more widespread and common in northern and eastern Australia than southern Australia (DEE 2018). The Terek Sandpiper mostly forages in the open, on soft wet intertidal mudflats or in sheltered estuaries, embayments, harbours or lagoons. The species has also been recorded on islets, mudbanks, sandbanks and spits, and near | Highly unlikely – This species is known to occur locally within tidal coastline areas; however, the study area lacks suitable habitat (wetlands, dams, shorelines) | Highly unlikely – This species is known to occur locally within tidal coastline areas; however, the study area lacks suitable | PMST, Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey area. Broome Sites F, G, H | | Source |
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| | | | | mangroves and occasionally in samphire (Halosarcia spp.). Birds are seldom near the edge of water, however, birds may wade into the water (Marchant & Higgins 1993). | | habitat (wetlands, dams, shorelines). | |
| **FISH** | | | | | | | |
| *Anoxypristis cuspidata* | Knife-tooth Sawfish | MI | MI | Primarily a benthic species, preferring sand, mud, and seagrass. *A. cuspidata* is found in estuaries, bays, and river mouths. It has a depth range from the shallows to 40 m (131 ft.) (Last and Stevens, 2009). Individuals have been recorded far upstream in rivers, including the Tachin river in Thailand. Though these accounts may be the result of confusion with other sawfish species. Estuaries are critical habitat for the juveniles (Peverell, 2005). | Highly unlikely - This species is known to occur locally within tidal coastline areas; however the study area lacks suitable habitat. | Highly unlikely - This species is known to occur locally within tidal coastline areas; however the study area lacks suitable habitat. | PMST |
| *Pristis clavata* | Dwarf Sawfish | VU | VU | The Dwarf Sawfish is a small, robust, shark-like ray which is mostly greenish-brown on the dorsal surface and white underneath, with paler fins. Early recorded specimens were significantly smaller than other sawfish species, around 140 cm in length, hence the common name of Dwarf Sawfish; however, recently specimens have been recorded with total lengths up to 318 cm (Stevens et al. 2008). The head is flattened with a broad rostrum (snout or bill) bearing 18–22 pairs of evenly spaced, lateral teeth. These rostral teeth are slender, with a groove developing along the rear margin of the tooth in adults (Thorburn et al. 2007a).<br>There are no data available on the range and occurrence of the Dwarf Sawfish prior to European settlement in northern Australia. Since European settlement, the species' Australian distribution has previously been considered to extend north from Cairns around the Cape York Peninsula in Queensland, across northern Australian waters to the Pilbara coast in Western Australia (Last & Stevens 1994; McAuley et al. 2005; Stevens et al. 2008). | Highly unlikely - This species is known to occur locally within tidal coastline areas; however the study area lacks suitable habitat. | Highly unlikely - This species is known to occur locally within tidal coastline areas; however the study area lacks suitable habitat. | PMST |
| *Pristis pristis* | Freshwater Sawfish | VU | P3 | The Freshwater Sawfish is a ray growing to 7 m, having five pairs of gill-openings on the ventral surface of the head; a distinguishing feature of rays. It has less than 20 | Highly unlikely - This species is known to occur locally within tidal coastline areas, | Highly unlikely - This species is known to occur locally within tidal coastline areas, | PMST, Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey area. Broome Sites F, G, H | | Source |
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| | | | | teeth on each side of its saw (Allen 1989a; Phillips et al. 2008).<br>The Freshwater Sawfish may potentially occur in all large rivers of northern Australia from the Fitzroy River, Western Australia, to the western side of Cape York Peninsula, Queensland. It is mainly confined to the main channels of large rivers (Allen 2000, pers. comm.).<br>The species is known from several drainages of northern Australia including the Fitzroy River, Durack River and Ord River in Western Australia; the Adelaide River, Victoria River and Daly River of the Northern Territory; and the Gilbert River, Mitchell River, Norman River and Leichhardt River of Queensland (Last & Stevens 1994). The species is also recorded from the McArthur River, Northern Territory (Merrick & Schmida 1984). In the Fitzroy River catchment it is probably confined to the main Fitzroy River; in the Durack River catchment it probably only occurs in the main Durack River; in the Ord River catchment it occurs only in the Main Ord Channel below Kununurra Dam and in the Pentecost River; and in the Victoria River catchment it is probably restricted to the main Victoria River and possibly Fitzmaurice River (Allen 2000, pers. comm.). | however the study area lacks suitable habitat. | however the study area lacks suitable habitat | |
| *Pristis zijsron* | Green Sawfish | VU | VU | The Green Sawfish is a species of large ray from the family Pristidae. Green Sawfish have a shark-like body, a flattened head and an elongated snout or rostrum, which is studded with 24–28 pairs of unevenly-spaced rostral teeth. This tooth-studded rostrum is commonly described as the 'saw'. The first dorsal fin origin is slightly behind the pelvic fin origin and the lower lobe of the caudal fin is much shorter than half the length of the upper lobe. Green Sawfish are greenish brown or olive in colour on their upper surfaces and pale to white on their undersides.<br>In Australian waters, Green Sawfish have historically been recorded in the coastal waters off Broome, Western Australia, around northern Australia and down the east coast as far as Jervis Bay, NSW (Stevens et al. 2005). | Highly unlikely - This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat. | Highly unlikely - This species is known to occur locally within tidal coastline areas, however the study area lacks suitable habitat. | PMST, Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey area. Broome Sites F, G, H | | Source |
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| | | EP BC Act | BC Act /DBCA | | Pre-site visit | Post-site visit | |
| | | | | Green sawfish are currently distributed from about the Whitsundays (Harry et al., 2011) in Queensland across northern Australian waters to Shark Bay in Western Australia. Individuals have been recorded in inshore coastal environments and estuaries but the species does not penetrate into freshwater. There are also records of green sawfish hundreds of kilometres offshore in relatively deep water (Stevens et al., 2005). | | | |
| **MAMMAL** | | | | | | | |
| *Dasyurus hallucatus* | Northern Quoll | EN | EN | The Northern Quoll is the smallest of the four Australian quoll species. It has a pointy snout and reddish brown fur, with a cream underside. It has white spots on its back and rump and a long, sparsely-furred, unspotted tail (Oakwood 2008). The tail length ranges between 202 and 345 mm. The hindfeet have striated pads and five toes (Oakwood 2008). Northern Quolls can weigh up to 1.2 kg, with the males (usually between 400 to 900 g) (Braithwaite & Begg 1995) being larger than the females (usually 300 to 500 g) (Braithwaite & Begg 1995, TSSC 2005).<br>In the Kimberley, records are scattered discontinuously from just south of Derby across to Wyndham. Declines are known from lowland areas and/or the semi-arid inland fringes of its range e.g. the south-west Kimberley (McKenzie 1981) and Purnululu National Park in south-east Kimberley (Woinarski 1992). | Highly unlikely – Not known to occur within the location of the study area or wider region. | Highly unlikely – Not known to occur within the location of the study area or wider region. | PMST, Naturemap, DBCA |
| *Hydromys chrysogaster* | Rakali, Water Rat | - | P4 | The Water-rat is one of Australia's largest rodents and is usually found near permanent bodies of fresh or brackish water. The Water-rat is one of Australia's only two amphibious mammals (the platypus is the other). They live in burrows alongside river and lake banks. | Highly unlikely – Not known to occur within the location of the study area or wider region and no habitat is present for the species. | Highly unlikely – Not known to occur within the location of the study area or wider region and no habitat is present for the species. | Naturemap, DBCA |
| *Macroderma gigas* | Ghost Bat | VU | VU | The Ghost Bat occurs in a wide range of habitats, and requires an undisturbed cave, deep fissure or disused mine shaft in which to roost. It is patchily distributed across Australia, and is sensitive to disturbance (Van Dyck and Strahan 2008). | Highly unlikely – Not known to occur within the location of the study area or wider region | Highly unlikely – Not known to occur within the location of the study area or wider region and no | PMST |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey area. Broome Sites F, G, H | | Source |
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| | | EP BC Act | BC Act /DBCA | | Pre-site visit | Post-site visit | |
| | | | | | and no habitat is present for the species. | habitat is present for the species. | |
| *Macrotis lagotis* | Greater Bilby | VU | VU | The Greater Bilby usually spends the daytime in burrows, often built against termite mounds, spinifex hummock or shrubs (Van Dyck and Strahan 2008). The Greater Bilby occupies three major vegetation types; open tussock grassland on uplands and hills, mulga woodland/shrubland growing on ridges and rises, and hummock grassland in plains and alluvial areas. In the south of its range, the Greater Bilby lives on rises and ridges among sparse grasses, especially mitchell grass Astrebla and short shrubs. In Western Australia there are disjunct populations in the Gibson Desert, south-western Kimberley, inland areas of the Pilbara and northern Great Sandy Desert. The current occurrence of this species is strongly associated with higher rainfall and temperatures, which promote areas of higher plant and food production (DCCEEW 2023). | Known – This species is known to occur locally and was recorded during the field survey. | Known – This species is known to occur locally and was recorded during the field survey. | PMST, Naturemap, DBCA |
| *Mesembriomys macrurus* | Golden-backed Tree-rat | - | P4 | The golden-backed tree-rat has undergone a catastrophic decline in the Northern Territory, southwest Kimberley and the Pilbara, probably leading to regional extinction in the latter in the last ten years. In WA it has disappeared from the Pilbara (McKenzie and Kerle 2008) and drier parts of the Kimberley (McKenzie 1981), with all known records since 1903 coming from the higher rainfall north-western Kimberley. | Unlikely – Not known to occur within the location of the study area or wider region, however woodland habitat is present in the survey area. | Unlikely – Not known to occur within the location of the study area or wider region, however woodland habitat is present in the survey area | Naturemap, DBCA |
| *Saccolaimus saccolaimus nudicluniatus* | Bare-rumped Sheathtail Bat | VU | VU | The Bare-rumped Sheath-tail Bat occurs mostly in lowland areas, typically in a range of woodland, forest and open environments (DotE 2016). The Bare-rumped Sheath-tail Bat has been suggested to forage over habitat edges such as the edge of rainforest and in forest clearings (Churchill 1998). There is no information is available on foraging habitat shifts between the dry and wet seasons. The small number of confirmed roosts located in Australia have all been in tree hollows. Overseas other subspecies (perhaps distinct species to the form(s) occurring in Australia) commonly roost in caves, overhangs and man-made structures. However, in Australia no individuals | Unlikely – Not known to occur within the location of the study area or wider region. | Known – recorded at Broome. | PMST |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey area. Broome Sites F, G, H | | Source |
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| | | | | have been found roosting in caves. For example, a survey conducted of about 1000 coastal caves in the Wet Tropics region failed to locate this species (DotE 2016). In 2011, morphological analyses of four S. flaviventris specimens held at the WAM indicated that they had been misidentified and are likely to belong to the species S. saccolaimus (Milne pers. comm., 2013). The bare-rumped sheath-tail bat is therefore likely to be distributed through the Kimberley region of WA as far west as Broome, however this has not been confirmed through genetic analyses (Milne pers. comm., 2013). | | | |
| *Trichosurus vulpecula arnhemensis* | Northern Brush-tailed Possum | VU | VU | A nocturnal and arboreal species that inhabits forests and tall woodlands of the monsoon tropics of the Kimberley and Top End typically in areas with adequate dense canopy density allowing the possum some arboreal habitat connectivity via canopy tree foliage. It feeds primarily on foliage, blossom and fruits, but will also forage on ground for invertebrates (Menkhorst and Knight 2004). Shelters in tree hollow. This species adapts well to rural and urban habitats (Ganslosser et.al 1991) although appears to be in general decline (Woinarski 2004). | Likely - The woodland habitat throughout the survey area has a paucity of trees that are preferred foraging and denning habitat for this species and they are known from the region. | Known - Recorded on camera at Site G. | PMST, Naturemap , DBCA |
| *Wyulda squamicaudata* | Scaly-tailed Possum | - | P4 | Trapping densities suggest that scaly-tailed possums prefer low, open woodlands and vine thickets. They are nocturnal and rely heavily on rock piles for shelter during the day. (Potter, et al., 2014; Runcie, 1999) | Highly unlikely – Not known to occur within the location of the study area or wider region and no habitat is present for the species. | Highly unlikely – Not known to occur within the location of the study area or wider region and no habitat is present for the species. | Naturemap , DBCA |
| *Xeromys myoides* | Water Mouse | VU | VU | This small rodent has dark grey silky fur above white below. Three separate populations are known: (Northern Territory, central south Queensland, south-east Queensland). Habitat Includes mangroves, saltmarsh, sedgelands, clay pans, heathlands and freshwater wetlands. Not known to occur in WA (Van Dyck and Strahan 2008). | Highly unlikely – Not known to occur within the location of the study area or wider region and no habitat is present for the species. | Highly unlikely – Not known to occur within the location of the study area or wider region and no habitat is present for the species. | PMST |
| **REPTILES** | | | | | | | |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey area. Broome Sites F, G, H | | Source |
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| | | EP BC Act | BC Act /DBCA | | Pre-site visit | Post-site visit | |
| *Crocodylus porosus* | Saltwater Crocodile | MI | MI | Studies from Arnhem Land (Northern Territory) indicated that the Salt-water Crocodile mostly occurs in tidal rivers, coastal floodplains and channels, billabongs and swamps (Webb et al. 1987) up to 150 km inland from the coast (Webb et al. 1983f). It has been noted that evaporation in isolated channels may lead to salinity levels that are twice that of seawater. The Salt-water Crocodile usually inhabits the lower (estuarine) reaches of rivers, while the upper reaches are inhabited by *Crocodylus johnstoni* (Fresh-water Crocodile); although, areas of overlap occur in some rivers (Webb et al. 1983a). In Queensland, the species is usually restricted to coastal waterways and floodplain wetlands. Populations may also be found hundreds of kilometres upstream, such as in the Fitzroy River and the waterways of the southern Gulf of Carpentaria (Read et al. 2004). | Highly unlikely - While recordings of the species have been made in the wider region, no habitat is present for the species. | Highly unlikely - While recordings of the species have been made in the wider region, no habitat is present for the species. | PMST |
| *Ctenotus angusticeps* | Airlie Island Ctenotus | - | P3 | On the mainland, the Airlie Island Ctenotus generally inhabits the landward fringe of salt marsh communities in samphire shrubland or marine couch grassland (Maryan et al. 2013) in the intertidal zone along mangrove (Grey Mangrove (*Avicennia marina*) with occasional Red Mangrove (*Rhizophora stylosa*)) margins, however, subtle differences in vegetation/topography exist among sites where the species has been recorded (Biologic 2012). | Highly unlikely - Occurs locally but suitable habitat not expected to be present for the species. | Highly unlikely - No suitable habitat is present for the species. | Naturemap , DBCA |
| *Lerista separanda* | Dampierland Plain Slider | - | P2 | The species has four well-developed limbs and a preference for sandy substrates (Wilson and Swan 2017). The records of this species represent a range extension on its previously known distribution, which was generally described as the southern Kimberley coast, between Kimbolton and Nita Downs. | Likely - Occurs locally. Suitable habitat expected to occur within survey areas. | Likely - Suitable habitat is present for the species within survey areas, namely low elevation ancient dunes supporting shrubland. | Naturemap , DBCA |
| *Simoselaps minimus* | Dampierland Burrowing Snake | - | P2 | A small burrowing (sand swimming) snake that appears to prefer deep loose coastal sand dunes and adjacent shrubland areas (Wilson and Swan 2013). | Likely - Known to occur locally, and potentially suitable habitat expected to occur within survey areas. | Likely – Habitat within survey areas is suitable, namely low elevation ancient dunes | Naturemap , DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey area. Broome Sites F, G, H | | Source |
|---|---|---|---|---|---|---|---|
| | | EP BC Act | BC Act /DBCA | | Pre-site visit | Post-site visit | |
| | | | | | | supporting shrubland. | |
| *Tiliqua scincoides intermedia* | Northern Blue-tongue Skink | CR | - | Northern Blue-tongue Lizards move widely across the savannah landscape but spend most of their time in small, fragmented patches of habitat that offer cooler moister conditions. Individuals spend long periods within small and distinctive habitat patches, interspersed with longer directional relocations from one patch to the next. The patches provide relatively shaded, cool, and damp conditions, with higher grass and more leaf-litter cover. The location of these patches in the landscape is probably determined by drainage patterns, soil moisture-holding ability, and stochastic recruitment of shade trees (Shine 2017; Price-Rees et al., 2013). | Likely - Occurs locally | Known - recorded within all sites (F,G,H) during the survey. | PMST |
| *Varanus mertensi* | Merten's Water Monitor | EN | - | Mertens' Water Monitor is a semi-aquatic lizard usually found basking on rocks, logs, trees and branches overhanging rivers, swamps and lagoons. It inhabits watercourses, billabongs, springs and soaks within its geographical distribution. The species also inhabits human-made water bodies such as dams and irrigation channels (Mayes et al., 2005). | Highly unlikely – Not known to occur within the location of the study area or wider region and no habitat is present for the species. | Highly unlikely – Not known to occur within the location of the study area or wider region and no habitat is present for the species. | PMST |
| *Varanus mitchelli* | Mitchell's Water Monitor | CR | - | Mitchell's Water Monitor is found in aquatic habitats throughout the northern parts of Western Australia and the Northern Territory (Cogger 2014). Its range may extend into far north-west Queensland (Macdonald 2016). It is not known to occur on any offshore islands: surveys of more than 66 islands across the Kimberley region and the Wessel, English and Tiwi island groups in the Northern Territory did not record the presence of Mitchell's Water Monitor (Woinarski et al. 1999, 2003; Palmer et al. 2013). | Highly unlikely – Not known to occur within the location of the study area or wider region and no habitat is present for the species. | Highly unlikely – Not known to occur within the location of the study area or wider region and no habitat is present for the species. | PMST |

**Fauna likelihood of occurrence assessment – Derby Sites**

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| **BIRDS** | | | | | | | |
| *Actitis hypoleucos* | Common Sandpiper | MI | MI | The species utilizes a wide range of coastal wetlands and some inland wetlands, with varying levels of salinity, and is mostly found around muddy margins or rocky shores and rarely on mudflats. The Common Sandpiper has been recorded in estuaries and deltas of streams, as well as on banks farther upstream; around lakes, pools, billabongs, reservoirs, dams and claypans, and occasionally piers and jetties. Generally the species forages in shallow water and on bare soft mud at the edges of wetlands; often where obstacles project from substrate, e.g. rocks or mangrove roots. Birds sometimes venture into grassy areas adjoining wetlands (Higgins & Davies 1996). | Unlikely – known to occur locally due to suitable extensive tidal mudflats and Derby's sewage settling ponds habitat. Survey area sites are not expected to have suitable habitat, pending the site visit to verify. | Unlikely – suitable habitat absent or marginal. Site D has a disturbed area subject to seasonal inundation which is regarded as limited and marginal. | PMST, Naturemap |
| *Anous stolidus* | Common Noddy | MI | MI | The Common Noddy is found in tropical and sub-tropical seas off the west, north and east coasts of Australia, from the Abrolhos Islands in WA to the islands of the Great Barrier Reef in Qld, as well as Norfolk and Lord Howe Islands. Some are seen almost annually in NSW as far south as Sydney. It also ranges across tropical parts of the Pacific, Indian and Atlantic Oceans (DCCEEW 2022). | Unlikely – uncommon in shallow coastal waters. | Unlikely – uncommon in shallow coastal waters. | PMST |
| *Anous tenuirostris melanops* | Australian Lesser Noddy | VU | VU | The Australian subspecies of the Australian lesser noddy *A. t. melanops* breeds only on three islands in the Houtman Abrolhos, off Western Australia, where it nests in mangroves. The birds remain near the breeding islands all year (Higgins and Davies 1996). | Unlikely – records are rare in the region. Prefers ocean and island habitat. | Unlikely – records are rare in the region. Prefers ocean and island habitat. | PMST |
| *Apus pacificus* | Fork-tailed Swift | MI | MI | The Fork-tailed Swift is common in coastal and sub coastal areas between Carnarvon and Augusta including near and offshore islands. There are scattered records along south coast from Denmark east to Cocklebiddy on the Great Australian Bight, and sparsely scattered records inland. They are found across a range of habitats, from inland open plains to wooded areas. They are most often observed over inland plains in Australia, but sometimes recorded over coastal cliffs and beaches as well as urban areas. They have been recorded well out to sea as well as from | Likely – numerous local records. | Known – recorded on site O, and likely to occur aerially over all sites on at least occasional or seasonal basis. | PMST, Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | offshore islands especially when on passage from Indonesia. This species is almost exclusively aerial (DCCEEW 2022). | | | |
| *Arenaria interpres* | Ruddy Turnstone | MI | MI | In Australia, Ruddy Turnstones are widespread around the coast of the mainland and off-shore islands. They breed on the northern coasts of Europe, Asia and North America. They are found on coastlines around the world, when not breeding or on passage. They are found singly or in small groups along the coastline and only occasionally inland. They are mainly found on exposed rocks or reefs, often with shallow pools, and on beaches. In the north, they are found in a wider range of habitats, including mudflats (DEE 2019b). | Unlikely – recorded locally on occasional basis due to suitable extensive tidal mudflats and Derby's sewage settling ponds habitat. Survey area sites are not expected to have suitable habitat, pending the site visit to verify. | Unlikely – suitable habitat absent or marginal. All survey sites lack suitable tidal or shallow wetland habitat. Site D has a disturbed area subject to seasonal inundation which is regarded as limited and marginal. | DBCA, Naturemap |
| *Calidris acuminata* | Sharp-tailed Sandpiper | VU | MI | In Australasia, the Sharp-tailed Sandpiper prefers muddy edges of shallow fresh or brackish wetlands, with inundated or emergent sedges, grass, saltmarsh or other low vegetation. This includes lagoons, swamps, lakes and pools near the coast, and dams, waterholes, soaks, bore drains and bore swamps, saltpans and hypersaline saltlakes inland. They also occur in saltworks and sewage farms. They use flooded paddocks, sedgelands and other ephemeral wetlands, but leave when they dry (DCCEEW 2022). | Unlikely – numerous local records due to suitable extensive tidal mudflats and Derby's sewage settling ponds habitat. Survey area sites are not expected to have suitable habitat, pending the site visit to verify. | Unlikely – suitable habitat absent or marginal. All survey sites lack suitable tidal or shallow wetland habitat. Site D has a disturbed area subject to seasonal inundation which is regarded as limited and marginal. | PMST, Naturemap, DBCA |
| *Calidris alba* | Sanderling | MI | MI | In Australia, the species is almost always found on the coast, mostly on open sandy beaches exposed to open sea-swell, and also on exposed sandbars and spits, and shingle banks, where they forage in the wave-wash zone and amongst rotting seaweed. Sanderlings also occur on beaches that may contain wave-washed rocky outcrops. Less often the species occurs on more sheltered sandy shorelines of estuaries, inlets and harbours (DEE 2019b). | Unlikely – Known to occur locally but no records in vicinity of survey areas. | Unlikely – suitable habitat absent or marginal. All survey sites lack suitable tidal or shallow wetland habitat. Site D has a disturbed area subject to seasonal | DBCA, Naturemap |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | | | inundation which is regarded as limited and marginal. | |
| *Calidris canutus* | Red Knot | VU | VU | In Australasia, the Red Knot mainly inhabits intertidal mudflats, sandflats and sandy beaches of sheltered coasts, in estuaries, bays, inlets, lagoons and harbours; sometimes on sandy ocean beaches or shallow pools on exposed wave-cut rock platforms or coral reefs. They are occasionally seen on terrestrial saline wetlands near the coast, such as lakes, lagoons, pools and pans, and recorded on sewage ponds and saltworks, but rarely use freshwater swamps. They rarely use inland lakes or swamps (DCCEEW 2022).They are found near mudflats and estuaries from Murchison to Bunbury but are then uncommon from Wilson Inlet to Esperance. In the Perth region they are mainly found in Alfred Cove and Peel Inlet (Nevill 2013). | Unlikely – Known to occur locally but no records in vicinity of survey areas. | Unlikely – suitable habitat absent or marginal. All survey sites lack suitable tidal or shallow wetland habitat. Site D has a disturbed area subject to seasonal inundation which is regarded as limited and marginal. | PMST |
| *Calidris ferruginea* | Curlew Sandpiper | CR | CR | Curlew Sandpipers mainly occur on intertidal mudflats in sheltered coastal areas, such as estuaries, bays, inlets and lagoons, and also around non-tidal swamps, lakes and lagoons near the coast, and ponds in saltworks and sewage farms. They are also recorded inland, though less often, including around ephemeral and permanent lakes, dams, waterholes and bore drains, usually with bare edges of mud or sand. They occur in both fresh and brackish waters. Occasionally they are recorded around floodwaters (DCCEEW 2023). | Unlikely – known to occur locally due to suitable extensive tidal mudflats and Derby's sewage settling ponds habitat. Survey area sites are not expected to have suitable habitat, pending the site visit to verify. | Unlikely – suitable habitat absent or marginal. Site D has a disturbed area subject to seasonal inundation which is regarded as limited and marginal. | PMST, Naturemap, DBCA |
| *Calidris melanotos* | Pectoral Sandpiper | MI | MI | In Australasia, the Pectoral Sandpiper prefers shallow fresh to saline wetlands. The species is found at coastal lagoons, estuaries, bays, swamps, lakes, inundated grasslands, saltmarshes, river pools, creeks, floodplains and artificial wetlands. The species is usually found in coastal or near coastal habitat but occasionally found further inland. It prefers wetlands that have open fringing mudflats and low, emergent or fringing vegetation, such as grass or samphire. The species has also been recorded in swamp overgrown with lignum. | Unlikely – numerous local records due to suitable extensive tidal mudflats and Derby's sewage settling ponds habitat. Survey area sites are not expected to have | Unlikely – suitable habitat absent or marginal. All survey sites lack suitable tidal or shallow wetland habitat. Site D has a disturbed area subject to seasonal | PMST, Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | They forage in shallow water or soft mud at the edge of wetlands (Higgins & Davies 1996). | suitable habitat, pending the site visit to verify. | inundation which is regarded as limited and marginal. | |
| *Calidris ruficollis* | Red-necked stint | MI | MI | The Red-necked Stint breeds in north-eastern Siberia and northern and western Alaska. It follows the East Asian-Australasian Flyway to spend the southern summer months in Australia. It is found widely in Australia, except in the arid inland. In Australia, Rednecked Stints are found on the coast, in sheltered inlets, bays, lagoons, estuaries, intertidal mudflats and protected sandy or coralline shores (Pizzey and Knight 2012). | Unlikely – numerous local records due to suitable extensive tidal mudflats and Derby's sewage settling ponds habitat. Survey area sites are not expected to have suitable habitat, pending the site visit to verify. | Unlikely – suitable habitat absent or marginal. All survey sites lack suitable tidal or shallow wetland habitat. Site D has a disturbed area subject to seasonal inundation which is regarded as limited and marginal. | DBCA, Naturemap |
| *Calidris subminuta* | Long-toed Stint | MI | MI | In WA the species is found mainly along the coast, with a few scattered inland records. On the south coast the Long-toed Stint is found from Esperance to Albany and inland to Lake Cassencarry and Dumbleyung. On the south-west coast the species is known from the Vasse River estuary, Guraga Lake and the Namming Nature Reserve. The species has occasionally been recorded in the Gascoyne Region, around Lake Wooleen, Meeberrie Station and McNeill Claypan. It is widespread around the Pilbara region and the Kimberley Division between<br>Karratha and Wyndham-Kununurra (DEE 2019b). It occurs in a variety of terrestrial wetlands. They prefer shallow freshwater or brackish wetlands including lakes, swamps, river floodplains, streams, lagoons and sewage ponds. | Unlikely – numerous local records due to suitable extensive tidal mudflats and Derby's sewage settling ponds habitat. Survey area sites are not expected to have suitable habitat, pending the site visit to verify. | Unlikely – suitable habitat absent or marginal. All survey sites lack suitable tidal or shallow wetland habitat. Site D has a disturbed area subject to seasonal inundation which is regarded as limited and marginal. | DBCA, Naturemap |
| *Calonectris leucomelas* | Streaked Shearwater | MI | MI | The streaked shearwater is a large, pale-faced shearwater that breeds in on islands off the southern Russian Far East, Japan, east China, Korea and Taiwan and migrates in the non breeding season to the waters between Papua New Guinea and Australia. The species rarely ventures south past the Kimberley with scattered records along the Pilbara coast (ALA 2021).It | Unlikely – records are rare in the region. Prefers ocean and island habitat. Uncommon in coastal areas. | Unlikely – records are rare in the region. Prefers ocean and island habitat. No suitable habitat. | PMST |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | prefers pelagic seas, shelf waters and further out; it is rarely found inshore (Morcombe 2004). | | | |
| *Cecropis daurica* | Red-rumped Swallow | MI | MI | The Red-rumped Swallow breeds in Europe and Asia and tropical Africa. In Australia the bird is a vagrant to Christmas Island and northern Australia during the nonbreeding season. It occurs in open country, overhead wires, swamps, grasslands and along the coast (Pizzey and Knight 2012). | Unlikely – not recorded locally and vagrant of northern Australia. | Unlikely – not recorded locally and vagrant of northern Australia. | PMST |
| *Charadrius leschenaultii* | Greater Sand Plover | VU | VU | In Australia, the Greater Sand Plover occurs in coastal areas in all states, though the greatest numbers occur in northern Australia, especially the north-west (Marchant & Higgins 1993). In northern Australia, the species is especially widespread between North West Cape and Roebuck Bay in WA; there are sparsely scattered records from the largely inaccessible area between Roebuck Bay and Darwin, but it often occurs in the Top End of the Northern Territory, including on Groote Eylandt (DCCEEW 2022). | Unlikely – known to occur locally due to several local and regional coastal records, and due to suitable extensive tidal mudflats and Derby's sewage settling ponds habitat. Survey area sites are not expected to have suitable habitat, pending the site visit to verify. | Unlikely – suitable habitat absent or marginal. Site D has a disturbed area subject to seasonal inundation which is regarded as limited and marginal. | PMST, Naturemap, DBCA, ALA |
| *Charadrius mongolus* | Lesser Sand Plover | EN | EN | Within Australia, the Lesser Sand-Plover is widespread in coastal regions, and has been recorded in all states. It mainly occurs in northern and eastern Australia, in southeastern parts of the Gulf of Carpentaria, western Cape York Peninsula and islands in Torres Strait, and along the entire east coast, though it occasionally also occurs inland. It is most numerous in Queensland and NSW. The species has also been recorded on Lord Howe Island, Norfolk Island and Christmas Island, Indian Ocean. In non-breeding grounds in Australia, this species usually occurs in coastal littoral and estuarine environments. It inhabits large intertidal sandflats or mudflats in sheltered bays, harbors and estuaries, and occasionally sandy ocean beaches, coral reefs, wave-cut rock platforms and rocky outcrops. It also sometime occurs in short saltmarsh or among mangroves. The species also inhabits saltworks and near-coastal saltpans, brackish swamps and sandy or silt islands in | Unlikely – local records are rare but known to occur regionally more commonly in coastal tidal shoreline habitats. | Unlikely – suitable habitat absent or marginal. Site D has a disturbed area subject to seasonal inundation which is regarded as limited and marginal. | Naturemap, DBCA, ALA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | river beds (Marchant & Higgins 1993). In north-western Australia, the species appears to use the Port Hedland saltworks in preference to nearby beaches. | | | |
| *Charadrius veredus* | Oriental Plover | MI | MI | In non-breeding grounds in Australia, this species usually occurs in coastal littoral and estuarine environments. It inhabits large intertidal sandflats or mudflats in sheltered bays, harbours and estuaries, and occasionally sandy ocean beaches, coral reefs, wave-cut rock platforms and rocky outcrops. In north-western Australia, the species appears to use the Port Hedland saltworks in preference to nearby beaches. The species is seldom recorded away from the coast, at margins of lakes, soaks and swamps associated with artesian bores (Marchant & Higgins 1993). | Unlikely – several local and regional records. Known to occur locally due to suitable extensive tidal mudflats and Derby's sewage settling ponds habitat. Survey area sites are not expected to have suitable habitat, pending the site visit to verify. | Unlikely – suitable habitat absent or marginal. Site D has a disturbed area subject to seasonal inundation which is regarded as limited and marginal. | PMST, ALA |
| *Chlidonias leucopterus* | White-winged Black Tern | MI | MI | The White-winged Black Tern is a non-breeding migrant to Australia. The species is widespread and common along south-western, northern and central-eastern coasts, with only scattered records of small numbers along the coasts elsewhere in southern Australia. In WA, the species is widespread on the southern west coast to the coasts of the Pilbara region and Kimberley. Few records are from inland regions, mainly along major river systems, such as the Ord drainage (DEE 2019b). | Unlikely – known to occur locally due to suitable extensive coastal habitat, and common in the wider region, however the survey area sites do not have suitable wetland habitat, pending the site visit to verify. | Unlikely – no suitable wetland. Site D has a disturbed areas subject to seasonal inundation which is regarded as limited and marginal. | Naturemap, DBCA. ALA |
| *Cuculus optatus* | Oriental Cuckoo | MI | MI | Non-breeding habitat only: monsoonal rainforest, vine thickets, wet sclerophyll forest or open Casuarina, Acacia or Eucalyptus woodlands. Frequently at edges or ecotones between habitat types. Riparian forest is favoured habitat in the Kimberley region. Typically in denser vegetation with more closed canopy (DCCEEW 2023). | Likely – several local records. | Known – recorded during field survey at site D. Likely to occur at least on an occasional basis | PMST, Naturemap, DBCA, ALA |
| *Erythrotriorchis radiatus* | Red Goshawk | EN | EN | The Red Goshawk occurs in coastal and sub-coastal areas in wooded and forested lands of tropical and warm-temperate Australia (Marchant & Higgins 1993). Riverine forests are also used frequently. Such habitats typically support high bird numbers and biodiversity, | Unlikely – not recorded locally. Occurrence would be considered as vagrant. | Unlikely – not recorded locally. Occurrence would be considered as vagrant. | PMST |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | especially medium to large species which the goshawk requires for prey. The Red Goshawk nests in large trees, frequently the tallest and most massive in a tall stand, and nest trees are invariably within 1 km of permanent water (DCCEEW 2023). | | | |
| *Chleobia gouldiae* | Gouldian Finch | EN | P4 | The Gouldian Finch inhabits open woodlands that are dominated by Eucalyptus trees and support a ground cover of Sorghum and other grasses (Boekel 1980). The critical components of suitable core habitat for the Gouldian Finch appear to be the presence of favoured annual and perennial grasses (especially Sorghum), a nearby source of surface water and, in the breeding season, unburnt hollow-bearing Eucalyptus trees (especially *E. tintinnans*, *E. brevifolia* and *E. leucophloia*) (Higgins et al. 2006). | Likely – recorded locally from desktop review. | Likely – local records and suitable foraging habitat. Therefore, likely to visit survey areas on frequent or seasonal basis. | PMST, Naturemap, DBCA |
| *Falco hypoleucos* | Grey Falcon | VU | VU | The Grey Falcon is an Australian endemic, usually confined to the arid inland. It inhabits Triodia grassland, Acacia shrubland, and lightly timbered arid woodland (Morcombe 2004). | Likely – occurs locally and regionally based on database searches. | Likely – local and regional occurrence and suitable foraging habitat. Therefore, likely to visit survey areas on at least occasional basis. | PMST, Naturemap, DBCA. ALA |
| *Falco peregrinus* | Peregrine Falcon | OS | OS | The Peregrine Falcon is uncommon but wide ranging across Australia. Found everywhere from woodlands to open grasslands and coastal cliffs – though less frequently in desert regions – it feeds almost entirely on other birds. It also eats rabbits and other moderate sized mammals, bats and reptiles. The Peregrine Falcon is very territorial during breeding season, the male courting the female with an impressive display of aerobatics (DEE 2019b, Morcombe 2004). | Likely – occurs locally and regionally based on database searches. | Likely – local and regional occurrence and suitable foraging habitat. Therefore, likely to visit survey areas on at least occasional basis. | Naturemap, DBCA, ALA |
| *Fregata ariel* | Lesser Frigatebird | MI | MI | The Lesser Frigatebird is said to be the most common and widespread frigatebird in Australian seas (DCCEEW 2022). It is common in tropical seas, breeding on remote islands, including Christmas Island in the Indian Ocean in recent years. These birds are most likely to be seen from the mainland prior to the | Highly unlikely – Numerous regional records associated with off-shore environment. This species is considered to be | Highly unlikely – This species is considered to be mainly pelagic and near-coastal. The survey area | PMST |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | onset of a tropical cyclone, and once this abates they disappear again | mainly pelagic and near-coastal. The survey area lacks suitable habitat. | lacks suitable habitat. | |
| *Fregata minor* | Great Frigatebird | MI | MI | The great frigatebird is a large seabird in the frigatebird family. There are nesting populations in the tropical Pacific (including the Galapagos Islands) and Indian Oceans, as well as a tiny population in the South Atlantic. The species is a lightly built, large seabird up to 105 cm long with predominantly black plumage. The species exhibits sexual dimorphism; the female is larger than the adult male and has a white throat and breast, and the male's scapular feathers have a purple-green sheen. In the breeding season, the male is able to distend its striking red gular sac. The species feeds on fish taken in flight from the ocean's surface. They feed in pelagic waters within 80 km of their breeding colony or roosting areas (DEE 2018). | Highly unlikely – This species is considered to be mainly pelagic and near-coastal. The survey area lacks suitable habitat. | Highly unlikely – This species is considered to be mainly pelagic and near-coastal. The survey area lacks suitable habitat. | PMST |
| *Gallinago megala* | Swinhoe's Snipe | MI | MI | This is a smaller species of migratory wader with a wingspan of 26-29cm and broad, white tips to tailfeathers and a bill that is longer and more stout than other snipe species (Pizzey & Knight, 2012).<br>The species has a preference for more wet, grassy wetlands and edges of reed-based swamps and migrates frequently over summer from Broome in the North West of Western Australia to the Cape York Peninsula in Queensland (Pizzey & Knight, 2012). | Unlikely – recorded locally on occasional basis due to suitable extensive tidal mudflats and Derby's sewage settling ponds habitat. Survey area sites are not expected to have suitable habitat, pending the site visit to verify. | Unlikely – suitable habitat absent or marginal. All survey sites lack suitable tidal or shallow wetland habitat. Site D has a disturbed area subject to seasonal inundation which is regarded as limited and marginal habitat at best. | Naturemap, DBCA |
| *Gallinago stenura* | Pin-tailed Snipe | MI | MI | In WA the species was reported at Pilbara, Port<br>Headland, Myaree Pool, Maitland River and near Karratha. During non-breeding period the Pin-tailed Snipe occurs most often in or at the edges of shallow freshwater swamps, ponds and lakes with emergent, sparse to dense cover of grass/sedge or other vegetation (DEE 2019b). | Unlikely – recorded locally on occasional basis due to suitable extensive tidal mudflats and Derby's sewage settling ponds | Unlikely – suitable habitat absent or marginal. All survey sites lack suitable tidal or shallow wetland habitat. Site D has a disturbed area | Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | | habitat. Survey area sites are not expected to have suitable habitat, pending the site visit to verify. | subject to seasonal inundation which is regarded as limited and marginal habitat at best. | |
| *Gelochelidon nilotica* | Gull-billed Tern | MI | MI | The Gull-billed Tern is nomadic or migratory species in Australia. Gull-billed Terns are found in freshwater swamps, brackish and salt lakes, beaches and estuarine mudflats, floodwaters, sewage farms, irrigated croplands and grasslands, where resources are favourable. They are only rarely found over the ocean. The Gull-billed Tern. Although essentially an inland species, outside breeding season it shows a distinct preference for saltmarshes and lagoons near the coast. Movements are not fully understood but it is common and widespread in Australia (Morcombe 2004). | Unlikely – there are numerous local records due to suitable extensive tidal mudflats and Derby's sewage settling ponds habitat. Survey area sites are not expected to have suitable habitat, pending the site visit to verify. | Unlikely – suitable habitat absent or marginal. All survey sites lack suitable tidal or shallow wetland habitat. Site D has a disturbed area subject to seasonal inundation which is regarded as limited and marginal habitat at best. | Naturemap, DBCA |
| *Glareola maldivarum* | Oriental Platincole | MI | MI | Non-breeding habitat only: monsoonal rainforest, vine thickets, wet sclerophyll forest or open Casuarina, Acacia or Eucalyptus woodlands. Frequently at edges or ecotones between habitat types. Riparian forest is favoured habitat in the Kimberley region. Typically in denser vegetation with more closed canopy (DCCEEW 2023). | Unlikely – there are several local records. Based on preliminary aerial imagery, the survey area sites are not expected to have suitable habitat, pending the site visit to verify. | Unlikely – all survey area sites lack suitable habitat (open plains). May occasionally hawk aerially over survey areas. | PMST, Naturemap, DBCA |
| *Hirundo rustica* | Barn Swallow | MI | MI | In Australia, the Barn Swallow is recorded in open country in coastal lowlands, often near water, towns and cities. Birds are often sighted perched on overhead wires, and also in or over freshwater wetlands, paperbark Melaleuca woodland, mesophyll shrub thickets and tussock grassland (DEE 2019). | Likely – occurs locally. | Likely - Occurs locally and habitat suitable. Likely to be present on at least occasional basis during non-breeding season. | PMST, Naturemap, DBCA. ALA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| *Hydroprogne caspia* | Caspian Tern | MI | MI | The Caspian Tern is mostly found in sheltered coastal embayments (harbours, lagoons, inlets, bays, estuaries and river deltas) and those with sandy or muddy margins are preferred. They also occur on near-coastal or inland terrestrial wetlands that are either fresh or saline, especially lakes (including ephemeral lakes), waterholes, reservoirs, rivers and creeks. They also use artificial wetlands, including reservoirs, sewage ponds and saltworks. In offshore areas the species prefers sheltered situations, particularly near islands, and is rarely seen beyond reefs (DEE 2019b). | Unlikely – This species is known to occur locally based on numerous records within coastline areas and inland lakes. The survey area sites are not expected to have suitable habitat (wetlands, dams, shorelines) based on preliminary aerial images. | Unlikely – The survey areas lack suitable habitat (coastal wetlands, dams, shorelines). Site D has disturbed areas subject to seasonal inundation which is regarded as limited and marginal habitat at best. | Naturemap, DBCA |
| *Limnodromus semipalmatus* | Asian Dowitcher | VU | VU | The Asian Dowitcher occurs in sheltered coastal Environments, such as embayments, coastal lagoons, estuaries and tidal creeks. They are known to frequent shallow water and exposed mudflats or sandflats. In Australia the Port Hedland Saltworks provides crucial habitat for the species. The species is commonly found in the round ponds and channels of saltworks and sewage farms. It is also found at near-coastal swamps and lakes (Higgins & Davies 1996). | Unlikely – recorded locally on occasional basis due to suitable extensive tidal mudflats and potentially Derby's sewage settling ponds habitat. Survey area sites are not expected to have suitable habitat, pending the site visit to verify. | Unlikely – suitable habitat absent or marginal. All survey sites lack suitable tidal or shallow wetland habitat. Site D has a disturbed low areas subject to seasonal inundation which is regarded as limited and marginal habitat at best. | PMST,Naturemap, DBCA, ALA |
| *Limosa lapponica* | Bar-tailed Godwit | MI | MI | Bar-tailed Godwits arrive in Australia each year in August from breeding grounds in the northern hemisphere. Birds are more numerous in northern Australia Bar-tailed Godwits inhabit estuarine mudflats, beaches and mangroves. They are common in coastal areas around Australia. They are social birds and are often seen in large flocks and in the company of other waders (Birdlife Australia 2019). | Unlikely – This species is known to occur locally based on numerous coastal records, both local and regional. The survey area sites are not expected to have suitable habitat (wetlands, dams, shorelines) | Unlikely – The survey areas lack suitable habitat (coastal wetlands, dams, shorelines). Site D has disturbed areas subject to seasonal inundation which is regarded as limited and | PMST, Naturemap, DBCA, ALA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | | based on preliminary aerial images. | marginal habitat at best. | |
| *Limosa lapponica menzbieri* | Northern Siberian (Yakutian) Bar-tailed Godwit | EN | EN | The bar-tailed godwit (all subspecies combined) has an extremely large global range. For the species, the global extent of occurrence is estimated to be 1,470,000 km2 (BirdLife International 2015). The subspecies L. l. menzbieri breeds in northern Siberia, Russia between the Khatanga River and the delta of the Kolyma River (Higgins & Davies 1996). This subspecies spends the nonbreeding period mostly in the north of Western Australia, but also in south-east Asia (Bamford et al. 2008). Migrating birds stage for over one month during both southwards and northwards migration in western and northern parts of the Yellow Sea (Leyrer et al. 2014). | Unlikely – This species is known to occur locally based on numerous coastal records, both local and regional. The survey area sites are not expected to have suitable habitat (wetlands, dams, shorelines) based on preliminary aerial images. | Unlikely – The survey areas lack suitable habitat (coastal wetlands, dams, shorelines). Site D has disturbed areas subject to seasonal inundation which is regarded as limited and marginal habitat at best. | PMST |
| *Limosa Limosa* | Black-tailed Godwit | MI | MI | In Australia the Black-tailed Godwit has a primarily coastal habitat environment. The species is commonly found in sheltered bays, estuaries and lagoons with large intertidal mudflats or sandflats, or spits and banks of mud, sand or shell-grit; occasionally recorded on rocky coasts or coral islets. The use of habitat often depends on the stage of the tide. It is also found in shallow and sparsely vegetated, near-coastal, wetlands; such as saltmarsh, saltflats, river pools, swamps, lagoons and floodplains. There are a few inland records, around shallow, freshwater and saline lakes, swamps, dams and bore-overflows. They also use lagoons in sewage farms and saltworks (Higgins & Davies 1996). | Unlikely – This species is known to occur locally based on numerous coastal records, both local and regional. The survey area sites are not expected to have lack suitable habitat (wetlands, dams, shorelines) based on preliminary aerial images. | Unlikely – The survey areas lack suitable habitat (coastal wetlands, dams, shorelines). Site D has disturbed areas subject to seasonal inundation which is regarded as limited and marginal habitat at best. | Naturemap, DBCA |
| *Malurus coronatus subsp. coronatus* | Purple-Crowned Fairy-Wren | EN | EN | The Purple-crowned Fairy-wren (western) is a small bird measuring approximately 14 cm in length, with a wing-span of approximately 16 cm, and weighing 9-13 g (Higgins et al. 2001; Rowley & Russell 1993). The plumage varies according to sex and age and, in males, season, but all birds, regardless of age, sex or time of year, are mostly warm-brown above, and white below with a buff wash, and have a long blue tail, dark bill, dark irises, | Unlikely – survey area is considered to be beyond current known range. | Unlikely – survey area is considered to be beyond current known range. | Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | and brownish legs and feet (Higgins et al. 2001). Adult females have dark grey colouring on the forehead, crown and nape, and a red-brown or chestnut 'mask' that extends from the base of the bill to around the eyes, thus framing and highlighting the narrow white supercilia and narrow white eye-rings, and over the ear-coverts (Higgins et al. 2001; Rowley & Russell 1993). The grey colouring on the head becomes noticeably browner as the plumage becomes worn (Higgins et al. 2001).<br>The Purple-crowned Fairy-wren (western) inhabits dense, riparian vegetation in the wet-dry tropics of Western Australia and the Northern Territory (Boekel 1979; Smith & Johnstone 1977; Rowley & Russell 1993, 1997). It is found near permanent rivers and springs (or associated billabongs and swamps) (Rowley 1988, 1993), where it occupies dense thickets of *Pandanus aquaticus* or canegrass and also occurs, less frequently, in rushes and shrubs (Boekel 1979; Mathews 1918; Rowley 1993; Sharland 1962; Smith & Johnstone 1977; Storr 1980; Rothwell 1962; van Doorn 2006, pers. comm.; Whitlock 1925).<br>The Purple-crowned Fairy-wren (western) occurs along waterways in the Kimberley Division of Western Australia, and east to the Victoria River Downs in the Northern Territory (Barrett et al. 2003; Blakers et al. 1984; Rowley 1993; Schodde & Mason 1999). Its distribution includes parts of the Fitzroy River, Drysdale River, Durack River and Ord River systems in Western Australia (Aumann 1991; Blakers et al. 1984; Rowley 1993; Smith & Johnstone 1977; Storr 1980), and the Victoria River system in the Northern Territory (Boekel 1979; Higgins et al. 2001; Storr 1977; Rowley 1993). | | | |
| *Motacilla cinerea* | Grey Wagtail | MI | MI | European and Asian species. Migrates in winter south to Indonesia and New Guinea. Rarely reaches Australia. Occurs usually near fresh streams, but also on mown grass, ploughed land or near sewerage ponds | Unlikely – Survey areas are beyond occurs as a vagrant in northern WA although several regional records from Broome area. | Unlikely – Survey areas are beyond occurs as a vagrant in northern WA although several regional records from Broome area | PMST, ALA |
| *Motacilla flava* | Yellow Wagtail | MI | MI | Occurs in open country near swamps, salt marshes, sewerage ponds, grassed surrounds to airfields, bare | Likely – occurs locally and wider | Likely – occurs locally and wider | PMST, ALA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | ground; occasionally on drier inland plains. Roosts in mangroves and other dense vegetation. Rare but regular visitor around Australia coast, especially the NW coast, Broome to Darwin (Morcombe 2004). | region based on database records. Expected to occur at least on occasional basis. | region based on database records. Expected to occur at least on occasional basis | |
| *Numenius madagascariensis* | Eastern Curlew | CR | CR | The Eastern Curlew is most commonly associated with sheltered coasts, especially estuaries, bays, harbours, inlets and coastal lagoons, with large intertidal mudflats or sandflats, often with beds of seagrass. Occasionally, the species occurs on ocean beaches (often near estuaries), and coral reefs, rock platforms, or rocky islets. The birds are often recorded among saltmarsh and on mudflats fringed by mangroves, sometimes within the mangroves, and in coastal saltworks and sewage farms. In the south west, Eastern Curlews are recorded from Eyre, and there are scattered records from Stokes Inlet to Peel Inlet (Marchant & Higgins 1993). They are uncommon further south of Geraldton, but can be spotted in Alfred Cove, Peel Inlet and the Albany region (Nevill 2013). | Unlikely – This species is known to occur locally based on numerous coastal records, both local and regional. The survey area sites are not expected to have suitable habitat (wetlands, dams, shorelines) based on preliminary aerial images. | Unlikely – The survey areas lack suitable habitat (coastal wetlands, dams, shorelines). Site D has disturbed areas subject to seasonal inundation which is regarded as limited and marginal habitat at best. | PMST, Naturemap, DBCA, ALA |
| *Numenius minutus* | Little Curlew | MI | MI | Little Curlews generally spend the non-breeding season in northern Australia from Port Hedland in WA to the Queensland coast (Minton 2002 pers. comm.). There are records of the species from inland Australia, and widespread but scattered records on the east coast. The Little Curlew is most often found feeding in short, dry grassland and sedgeland, including dry floodplains and blacksoil plains, which have scattered, shallow freshwater pools or areas seasonally inundated. Open woodlands with a grassy or burnt understory, dry saltmarshes, coastal swamps, mudflats or sandflats of estuaries or beaches on sheltered coasts, mown lawns, gardens, recreational areas, ovals, racecourses and verges of roads and airstrips are also used (Higgins & Davies 1996). | Unlikely – This species is known to occur locally based on numerous coastal records, both local and regional. The survey area sites are not expected to have suitable habitat (wetlands, dams, shorelines) based on preliminary aerial images. | Unlikely – The survey areas lack suitable habitat (coastal wetlands, dams, shorelines). Site D has disturbed areas subject to seasonal inundation which is regarded as limited and marginal habitat at best. | Naturemap, DBCA |
| *Numenius phaeopus* | Eurasian Whimbrel | MI | MI | The Whimbrel is often found on the intertidal mudflats of sheltered coasts. It is also found in harbours, lagoons, estuaries and river deltas, often those with mangroves, but also open, un-vegetated mudflats. It is occasionally found on sandy or rocky beaches, on coral or rocky islets, or on intertidal reefs and platforms. It | Unlikely – This species is known to occur locally based on numerous coastal records, both local and | Unlikely – The survey areas lack suitable habitat (coastal wetlands, dams, shorelines). Site D has | Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | has been infrequently recorded using saline or brackish lakes near coastal areas. It also used saltflats with saltmarsh, or saline grasslands with standing water left after high spring-tides, and in similar habitats in sewage farms and saltfields (Higgins & Davies 1996). There are a small number of inland records from saline lakes and canegrass swamps. It has also been recorded in coastal dunes and a football field. | regional. The survey area sites are not expected to have suitable habitat (wetlands, dams, shorelines) based on preliminary aerial images. | disturbed areas subject to seasonal inundation which is regarded as limited and marginal habitat at best. | |
| *Pandion haliaetus* | Osprey | MI | MI | The breeding range of the Osprey extends around the northern coast of Australia (including many offshore islands) from Albany in WA to Lake Macquarie in NSW; with a second isolated breeding population on the coast of South Australia, extending from Head of Bight east to Cape Spencer and Kangaroo Island. Eastern Ospreys occur in littoral and coastal habitats and terrestrial wetlands of tropical and temperate Australia and offshore islands (DCCEEW 2022). | Unlikely – This species is known to occur locally based on numerous coastal records, both local and regional. The survey area sites are not expected to have suitable habitat (coastal and estuarine) based on preliminary aerial images. | Unlikely – The survey areas lack suitable coastal and estuarine habitat | PMST |
| *Papasula abbotti* | Abbot's Booby | EN | EN | Currently, Abbott's Booby is only known to breed on Christmas Island and to forage in the waters surrounding the island Within Christmas Island, most nests are found in the tall plateau forest on the central and western areas of the island, and in the upper terrace forest of the northern coast. The species was once thought to be restricted to areas above 150 m, mostly on the sides of north-west facing slopes but a survey in 1991 located them in some new areas Some of these areas had been known but were not recorded in a 1981 survey This revised distribution would be due partly to movement of the birds but the survey also discovered previously unknown nesting areas (DCCEEW 2022). | Highly unlikely - The survey area is beyond the known range of this pelagic species. Highly unlikely to be recorded in coastal areas including the survey area sites. | Highly unlikely - The survey area is beyond the known range of this pelagic species. Highly unlikely to be recorded in coastal areas including the survey area sites. | PMST |
| *Pezoporus occidentalis* | Night Parrot | EN | EN | Night Parrots usually inhabit arid or semi-arid grasslands that are dominated by spinifex, though they | Unlikely – Survey area and wider Fitzroy Trough is | Unlikely – habitat assessment indicate that the | PMST |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | have also been recorded in shrublands dominated by samphire, bluebush and saltbush (Morcombe 2006). | not considered to be a high priority bioregion for this species. | survey sites are not considered as suitable roosting or breeding habitat based on lack of Triodia. | |
| *Phaethon lepturus* | White-tailed Tropicbird | MI | MI | The species is primarily oceanic in tropical waters, rarely inshore, and only is near land when breeding. Nests are located on islands and atolls utilising a variety of habitats from closed canopy rainforest to bare sandy ground and rugged rocky terrain (Commonwealth of Australia, 2020). | Highly unlikely – occupies pelagic ocean habitat off north of Western Australia. | Highly unlikely – occupies pelagic ocean habitat off north of Western Australia. Any occurrence would be considered rare vagrant. | PMST |
| *Phaethon rubricauda westralis* | Red-tailed Tropicbird | EN | EN | In Australia, it nests on Queensland's coral islands (including Raine Island and Lady Elliot Island), and Ashmore Reef and Rottnest Island off Western Australia, as well as Sugarloaf Rock at Cape Naturaliste and Busselton on the Western Australian coastline itself, and the offshore territories of the Cocos (Keeling) Islands, Norfolk and Lord Howe islands. In New Zealand territory it breeds on the Kermadec Islands. It frequents areas of ocean with water temperatures from 24 to 30 °C (75 to 86 °F) and salinity under 35% in the southern hemisphere and 33.5% in the northern hemisphere. In the Pacific Ocean, the southern boundary of its range runs along the 22 °C (72 °F) summer surface isotherm The warm waters of the Leeuwin Current facilitate the species nesting at Cape Leeuwin in southwestern Australia, yet is only a rare visitor to New South Wales at corresponding latitudes on the Australian east coast (Higgens et al 1990). | Unlikely – although wide-ranging it prefers pelagic and off-shore island habitat. | Unlikely – although wide-ranging it prefers pelagic and off-shore island habitat. | PMST |
| *Phalaropus lobatus* | Red-necked Phalarope | MI | MI | A smaller, lightly- built migratory wader species, with a wingspan of 18-19cm, black, needle-like bill and conspicuous black curves through eyes onto ear-coverts.<br>Species has preference for freshwater wetlands and shallow pools and migrates regularly from December to April in the North West Western Australia. | Unlikely – There is one local record and several in wider region. However, the survey area sites are not expected to have suitable | Unlikely – The survey areas lack suitable habitat (coastal wetlands, dams, shorelines). Site D has disturbed areas subject to | Naturemap, DBCA, ALA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | | habitat (wetlands, lakes, shorelines) based on preliminary aerial images. | seasonal inundation which is regarded as limited and marginal habitat at best. | |
| *Philomachus pugnax* | Ruff | MI | MI | This species is a tall, long-necked migratory wader with a wingspan of 20-30 cm and prominent variegated black, chestnut and white ruff markings, and males growing significantly larger than females (Pizzey & Knight, 2012).<br>As a migratory, visiting species, they can be found in both brackish and freshwater mudflats and wetlands concentrated along coastal Australia in the Northern part of the country (Pizzey & Knight, 2012). | Unlikely – There is one local record and several in wider region. However, the survey area sites are not expected to have suitable habitat (wetlands, lakes, shorelines) based on preliminary aerial images. | Unlikely – The survey areas lack suitable habitat (coastal wetlands, dams, shorelines). Site D has disturbed areas subject to seasonal inundation which is regarded as limited and marginal habitat at best. | Naturemap, DBCA, ALA |
| *Plegadis falcinellus* | Glossy Ibis | MI | MI | The Glossy Ibis' preferred habitat for foraging and breeding are fresh water marshes at the edges of lakes and rivers, lagoons, flood-plains, wet meadows, swamps, reservoirs, sewage ponds, rice-fields and cultivated areas under irrigation. The species is occasionally found in coastal locations such as estuaries, deltas, saltmarshes and coastal lagoons. Within Australia, the largest contiguous areas of prime habitat are in inland and northern floodplain areas (Marchant and Higgins 1990). | Unlikely – There are numerous local and regional records, however the survey area sites are not expected to have suitable habitat (shallow wetlands, lakes, shorelines) based on preliminary aerial images. | Unlikely – The survey areas lack suitable habitat (coastal wetlands, dams, shorelines). Site D has localised disturbed areas subject to seasonal inundation which is regarded as limited and marginal habitat at best. | Naturemap, DBCA, ALA |
| *Pluvialis fulva* | Pacific Golden Plover | MI | MI | The Pacific Golden Plover breeds on the Arctic tundra in western Alaska. It winters in South America and islands of the Pacific Ocean to India, Indonesia and Australia. In Australia it is widespread along the coastline. Pacific Golden Plovers usually occur on beaches, mudflats and sandflats (sometimes in | Unlikely – There are numerous local and regional records, however the survey area sites are not | Unlikely – The survey areas lack suitable habitat (coastal wetlands, dams, shorelines). Site D has | Naturemap, DBCA, ALA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | vegetation such as mangroves, low saltmarsh such as Sarcocornia, or beds of seagrass) in sheltered areas including harbours, estuaries and lagoons, and also in evaporation ponds in saltworks. The species is also sometimes recorded on islands, sand and coral cays and exposed reefs and rocks (DEE 2019b). | expected to have suitable habitat (shallow wetlands, lakes, shorelines) based on preliminary aerial images. | localised disturbed areas subject to seasonal inundation which is regarded as limited and marginal habitat at best. | |
| *Pluvialis squatarola* | Grey Plover | MI | MI | The Grey Plover breeds around the Arctic regions and migrates to the southern hemisphere, being a regular summer migrant to Australia, mostly to the west and south coasts. It is generally sparse but not uncommon in some areas. It is occasionally found inland. It is almost entirely coastal, being found mainly on marine shores, inlets, estuaries and lagoons with large tidal mudflats or sandflats for feeding, sandy beaches for roosting, and also on rocky coasts (Birdlife Australia 2019). | Unlikely – There are local and regional records, however the survey area sites are not expected to have suitable habitat (shallow wetlands, lakes, shorelines) based on preliminary aerial images. | Unlikely – The survey areas lack suitable habitat (coastal wetlands, dams, shorelines). Site D has localised disturbed areas subject to seasonal inundation which is regarded as limited and marginal habitat at best. | Naturemap, DBCA, ALA |
| *Polytelis alexandrae* | Princess Parrot | VU | VU | The Princess Parrot is confined to arid regions of Western Australia, the Northern Territory, and South Australia. The Princess Parrot inhabits sand dunes and sand flats in the arid zone of western and central Australia. It occurs in open savannah woodlands and shrublands that usually consist of scattered stands of Eucalyptus (including *E. gongylocarpa, E. chippendalei* and mallee species), *Casuarina* or *Allocasuarina* trees; an understorey of shrubs such as *Acacia* (especially *A. aneura*), *Cassia*, *Eremophila*, *Grevillea*, *Hakea* and *Senna*; and a ground cover dominated by *Triodia* species. It also frequents *Eucalyptus* or *Allocasuarina* trees in riverine or littoral areas (DCCEEW 2023). | Highly unlikely – the survey area sites are beyond northern limit of the species' known range. Occurs in arid bioregions to the south. Any local occurrence would be considered vagrant. | Highly unlikely – the survey area sites are beyond northern limit of the species' known range. Occurs in arid bioregions to the south. Any local occurrence would be considered vagrant. | PMST |
| *Rostratula australis* | Australian Painted Snipe | EN | EN | The Australian Painted Snipe is restricted to Australia with historical records from around the Perth region in Western Australia. Prefers fringes of swamps, dams and nearby marshy areas where there is a cover of | Unlikely – There is a local record of this species locally, and potentially | Unlikely – Based on the site assessment, the survey area lacks | PMST, Naturemap, DBCA. ALA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | grasses, lignum, low scrub or open timber nests on the ground amongst tall vegetation, such as grasses, tussocks or reeds. The nest consists of a scrape in the ground, lined with grasses and leaves. Breeding is often in response to local conditions; generally occurs from September to December. Incubation and care of young is all undertaken by the male only. Forages nocturnally on mud-flats and in shallow water. Feeds on worms, molluscs, insects and some plant-matter (DCCEEW 2023). | suitable habitat fringing tidal areas, however based on the desktop assessment, the survey area lacks suitable habitat, namely low dense fringing wetland vegetation. | suitable habitat, namely low dense fringing wetland vegetation | |
| *Sternula albifrons* | Little Tern | MI | MI | In Australia, Little Terns inhabit sheltered coastal environments, including lagoons, estuaries, river mouths and deltas, lakes, bays, harbours and inlets, especially those with exposed sandbanks or sand-spits, and also on exposed ocean beaches (DCCEEW 2022). | Unlikely – This species known to occur locally within coastal and tidal waters, however based on the desktop assessment, the survey area lacks suitable habitat. | Unlikely – Based on field assessment, the survey area lacks suitable coastal wetland habitat. | PMST, Naturemap, DBCA |
| *Tringa brevipes* | Grey-tailed Tattler | MI | P4 | Within Australia, the Grey-tailed Tattler has a primarily northern coastal distribution and is found in most coastal regions (Higgins & Davies 1996). The Grey-tailed Tattler is often found on sheltered coasts with reefs and rock platforms or with intertidal mudflats. It can also be found at intertidal rocky, coral or stony reefs as well as platforms and islets that are exposed at low tide (DEE 2018). | Unlikely – There are local and regional records, however based on the desktop review and preliminary aerial images, the survey area sites are not expected to have suitable shorelines or wetland habitat. | Unlikely – The survey areas lack suitable habitat (coastal wetlands, shorelines). Site D has localised disturbed areas subject to seasonal inundation which is regarded as limited and marginal habitat at best. | Naturemap, DBCA |
| *Tringa glareola* | Wood Sandpiper | MI | MI | The Wood Sandpiper uses well-vegetated, shallow, freshwater wetlands, such as swamps, billabongs, lakes, pools and waterholes. Wood Sandpipers are more numerous in the north than the south of Australia and are also found in New Guinea, Africa, the Indian subcontinent and South-east Asia. They breed widely across the north of Europe and Asia, mostly in | Unlikely – There are numerous local and regional records, however based on the desktop review and preliminary aerial | Unlikely – The survey areas lack suitable habitat (coastal wetlands, shorelines). Site D has localised disturbed areas | Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | Scandinavia, Baltic countries and Russia. They are the most abundant migratory wader in non-coastal areas of Asia (DEE 2019b). | images, the survey area sites are not expected to have suitable shorelines or wetland habitat. | subject to seasonal inundation which is regarded as limited and marginal habitat. | |
| *Tringa nebularia* | Common Greenshank | EN | MI | The Common Greenshank is a heavily built, elegant wader, 30–35 cm in length, with a wingspan of 55–65 cm and weight up to 190 g for both males and females. The bill is long and slightly upturned and the legs are long and yellowish-green. In flight, all plumages show uniformly dark upperwing and constrasting white rump extending in a white wedge up the back, whitish tail and tips of toes projecting slightly beyond the tip of the tail. The sexes are alike (Higgins & Davies 1996).<br>The species is seen singly or in small to large flocks (sometimes hundreds) in a variety of coastal and inland wetlands. The Common Greenshank does not breed in Australia, however, the species occurs in all types of wetlands and has the widest distribution of any shorebird in Australia (Higgins & Davies 1996). It occurs around most of the coast from Cape Arid in the south to Carnarvon in the north-west. In the Kimberleys it is recorded in the south-west and the north-east, with isolated records from the Bonaparte Archipelago (Higgins & Davies 1996). | Unlikely – There are numerous local and regional records, however based on the desktop review and preliminary aerial images, the survey area sites are not expected to have suitable shorelines or wetland habitat. | Unlikely – The survey areas lack suitable habitat (coastal wetlands, shorelines). Site D has localised disturbed areas subject to seasonal inundation which is regarded as limited and marginal habitat. | PMST, Naturemap, DBCA |
| *Tringa stagnatalis* | Marsh Sandpiper | MI | MI | The Marsh Sandpiper lives in permanent or ephemeral wetlands of varying salinity, including swamps, lagoons, billabongs, saltpans, saltmarshes, estuaries, pools on inundated floodplains, and intertidal mudflats and regularly at sewage farms and saltworks. They are recorded less often at reservoirs, waterholes, soaks, bore-drain swamps and flooded inland lakes. In north Australia they prefer intertidal mudflats (Higgins & Davies<br>1996), although surveys in Kakadu National Park recorded more birds around shallow freshwater lakes than in areas influenced by tide. At the Top End they often use ephemeral pools on inundated freshwater and tidal floodplains (Higgins & Davies 1996). They are | Unlikely – There are numerous local and regional records, however based on the desktop review and preliminary aerial images, the survey area sites are not expected to have suitable shorelines or wetland habitat. | Unlikely – The survey areas lack suitable habitat (coastal wetlands, shorelines). Site D has localised disturbed areas subject to seasonal inundation which is regarded as limited and marginal habitat. | Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | found infrequently around mangroves (Higgins & Davies 1996). | | | |
| *Tyto novaehollandiae kimberli* | Masked Owl (northern) | VU | VU | The range of the Masked Owl is a broad coastal band around most of mainland Australia and throughout Tasmania, and for the most part is less than 300 km from the coast. Population numbers are low on the mainland and several states give this species special conservation status. The Masked Owl inhabits heavy forests, and will hunt over open woodlands, timbered waterways and open country on the fringe of these areas. The main requirements are tall trees with suitable hollows for nesting and roosting and adjacent areas for foraging. Masked Owls are territorial, and pairs remain in or near the territory all year round (Birdlife Australia 2019). | Unlikely – not recorded locally and there are few regional records. | Unlikely – the survey area is considered marginal habitat at best as it lacks tall wet forest or deep vegetated gully habitat favoured by this species. | PMST |
| *Xenus cinereus* | Terek Sandpiper | MI | MI | In Australia, the Terek Sandpiper has a primarily coastal distribution, with occasional records inland. It is more widespread and common in northern and eastern Australia than southern Australia (DEE 2018). The Terek Sandpiper mostly forages in the open, on soft wet intertidal mudflats or in sheltered estuaries, embayments, harbours or lagoons. The species has also been<br>recorded on islets, mudbanks, sandbanks and spits, and near mangroves and occasionally in samphire (Halosarcia spp.). Birds are seldom near the edge of water, however, birds may wade into the water (Marchant<br>& Higgins 1993). | Unlikely – There are several local and regional records, however based on the desktop review and preliminary aerial images, the survey area sites are not expected to have suitable shorelines or wetland habitat. | Unlikely – The survey areas lack suitable habitat (coastal wetlands, shorelines). Site D has localised disturbed areas subject to seasonal inundation which is regarded as limited and marginal habitat. | Naturemap, DBCA |
| **FISH** | | | | | | | |
| *Glyphus garricki* | Northern River Shark | - | P1 | A rare greyish shark with the grey colour extending about one eye diameter distance below the eye, no dark blotch on the pelvic-fin tips, small eyes and a broadly-rounded snout, and the second dorsal fin about equal to or more than half the height of the first dorsal fin and positioned above the anal fin. The species reaches a maximum length of 250cm (Gomon & Bray, 2017).<br>The distribution of the Northern River Shark is uncertain. It occurs in marine, freshwater, and estuarine | Highly unlikely - This species is known to occur in local waters however the survey area lacks suitable habitat. | Highly unlikely - This species is known to occur locally however suitable habitat absent from survey area. | Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | habitats and is known to occur in several areas in Western Australia (Ord and King Rivers, King Sound and Joseph Bonaparte Gulf) and Northern Territory (South and East Alligator Rivers and Wessel islands) (Last and Stevens 2009).<br>The Northern River Shark is found in large tidal tropical river systems and coastal habitats with high turbidity, however the species is largely believed to be restricted to freshwater and brackish parts of river systems. | | | |
| *Pristis clavata* | Dwarf Sawfish | VU | VU | The Dwarf Sawfish is a small, robust, shark-like ray which is mostly greenish-brown on the dorsal surface and white underneath, with paler fins. Early recorded specimens were significantly smaller than other sawfish species, around 140 cm in length, hence the common name of Dwarf Sawfish; however, recently specimens have been recorded with total lengths up to 318 cm (Stevens et al. 2008). The head is flattened with a broad rostrum (snout or bill) bearing 18–22 pairs of evenly spaced, lateral teeth. These rostral teeth are slender, with a groove developing along the rear margin of the tooth in adults (Thorburn et al. 2007a).<br>There are no data available on the range and occurrence of the Dwarf Sawfish prior to European settlement in northern Australia. Since European settlement, the species' Australian distribution has previously been considered to extend north from Cairns around the Cape York Peninsula in Queensland, across northern Australian waters to the Pilbara coast in Western Australia (Last & Stevens 1994; McAuley et al. 2005; Stevens et al. 2008). | Highly unlikely - This does not occur in northern Australia. | Highly unlikely - This does not occur in northern Australia. | PMST |
| *Pristis pristis* | Freshwater Sawfish | VU | VU | The Freshwater Sawfish is a ray growing to 7 m, having five pairs of gill-openings on the ventral surface of the head; a distinguishing feature of rays. It has less than 20 teeth on each side of its saw (Allen 1989a; Phillips et al. 2008).<br>The Freshwater Sawfish may potentially occur in all large rivers of northern Australia from the Fitzroy River, Western Australia, to the western side of Cape York Peninsula, Queensland. It is mainly confined to the main channels of large rivers (Allen 2000, pers. comm.). | Highly unlikely - This species is known to occur locally within coastal waters and this habitat is absent from the survey area. | Highly unlikely - This species is known to occur locally within coastal waters and this habitat is absent from the survey area. | PMST |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | The species is known from several drainages of northern Australia including the Fitzroy River, Durack River and Ord River in Western Australia; the Adelaide River, Victoria River and Daly River of the Northern Territory; and the Gilbert River, Mitchell River, Norman River and Leichhardt River of Queensland (Last & Stevens 1994). The species is also recorded from the McArthur River, Northern Territory (Merrick & Schmida 1984). In the Fitzroy River catchment it is probably confined to the main Fitzroy River; in the Durack River catchment it probably only occurs in the main Durack River; in the Ord River catchment it occurs only in the Main Ord Channel below Kununurra Dam and in the Pentecost River; and in the Victoria River catchment it is probably restricted to the main Victoria River and possibly Fitzmaurice River (Allen 2000, pers. comm.). | | | |
| *Pristis zijsron* | Green Sawfish | VU | VU | The Green Sawfish is a species of large ray from the family Pristidae. Green Sawfish have a shark-like body, a flattened head and an elongated snout or rostrum, which is studded with 24–28 pairs of unevenly-spaced rostral teeth. This tooth-studded rostrum is commonly described as the 'saw'. The first dorsal fin origin is slightly behind the pelvic fin origin and the lower lobe of the caudal fin is much shorter than half the length of the upper lobe. Green Sawfish are greenish brown or olive in colour on their upper surfaces and pale to white on their undersides.<br>In Australian waters, Green Sawfish have historically been recorded in the coastal waters off Broome, Western Australia, around northern Australia and down the east coast as far as Jervis Bay, NSW (Stevens et al. 2005).<br>Green sawfish are currently distributed from about the Whitsundays (Harry et al., 2011) in Queensland across northern Australian waters to Shark Bay in Western Australia. Individuals have been recorded in inshore coastal environments and estuaries but the species does not penetrate into freshwater. There are also records of green sawfish hundreds of kilometres offshore in relatively deep water (Stevens et al., 2005). | Highly unlikely - This species is known to occur locally within coastal waters and this habitat is absent from the survey area. | Highly unlikely - This species is known to occur locally within coastal waters and this habitat is absent from the survey area. | PMST |
| **MAMMALS** | | | | | | | |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| *Dasyurus hallucatus* | Northern Quoll | EN | EN | The Northern Quoll is the smallest of the four Australian quoll species. It has a pointy snout and reddish brown fur, with a cream underside. It has white spots on its back and rump and a long, sparsely-furred, unspotted tail (Oakwood 2008). The tail length ranges between 202 and 345 mm. The hindfeet have striated pads and five toes (Oakwood 2008). Northern Quolls can weigh up to 1.2 kg, with the males (usually between 400 to 900 g) (Braithwaite & Begg 1995) being larger than the females (usually 300 to 500 g) (Braithwaite & Begg 1995, TSSC 2005).<br>In the Kimberley, records are scattered discontinuously from just south of Derby across to Wyndham. Declines are known from lowland areas and/or the semi-arid inland fringes of its range e.g. the south-west Kimberley (McKenzie 1981) and Purnululu National Park in south-east Kimberley (Woinarski 1992). | Unlikely – Not known to occur within the location of the survey area or wider study area. | Unlikely – Not known to occur within the location of the survey area. | PMST |
| *Hipposideros stenotis* | Northern leaf-nosed bat | - | P2 | This is a small, pale brown, micro-bat species reaching a total length of 46mm with reduced wart-like projections across leaf-nose in comparison to other leaf-nosed species (Menkhorst & Knight, 2004).<br>The species is rare through the Northern section of both the Northern Territory and West Kimberley with specific preference for sandstone caves and dis-used mines (Menkhorst & Knight, 2004). | Unlikely – There are few regional records, and based on desktop assessment, the survey area habitat is expected to be marginal. | Unlikely – Based on the field assessment, the survey area lacks rocky cave - forming or potential day roost habitat. | Naturemap, DBCA |
| *Macroderma gigas* | Ghost Bat | VU | VU | The Ghost Bat occurs in a wide range of habitats, and requires an undisturbed cave, deep fissure or disused mine shaft in which to roost. It is patchily distributed across Australia, and is sensitive to disturbance (Van Dyck and Strahan 2008). | Unlikely – There are few regional records, and 1 local historical record. The survey area habitat is expected to be marginal. | Unlikely – Based on the field assessment, the survey area lacks rocky cave - forming geology known to be preferred day roost habitat. Large tree hollows may be marginal roost habitat. | PMST, Naturemap, DBCA |
| *Macrotis lagotis* | Greater Bilby | VU | - | The Greater Bilby usually spends the daytime in burrows, often built against termite mounds, spinifex hummock or shrubs (Van Dyck and Strahan 2008). The Greater Bilby occupies three major vegetation types; | Unlikely – Occurs regionally within Dampierland Peninsula with | Unlikely – Habitat within survey area sites in marginal | PMST |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | open tussock grassland on uplands and hills, mulga woodland/shrubland growing on ridges and rises, and hummock grassland in plains and alluvial areas. In the south of its range, the Greater Bilby lives on rises and ridges among sparse grasses, especially mitchell grass Astrebla and short shrubs. In Western Australia there are disjunct populations in the Gibson Desert, south-western Kimberley, inland areas of the Pilbara and northern Great Sandy Desert. The current occurrence of this species is strongly associated with higher rainfall and temperatures, which promote areas of higher plant and food production (DCCEEW 2023). | records to the south and west. Survey area location is geographically marginal. | vegetation structure. | |
| *Ozimops cobourgianus* | Northern Coastal Free-tailed Bat | | P1 | This molossid bat occurs across northern areas from Exmouth extending to Gulf of Carpentaria. Ecology is not well understood, but usually associated with mangroves and coastal woodlands in where they roost in the tree hollows. It is a relatively small species around fifty millimetres total length. Several records know from Dampierland bioregion. | Likely - Foraging habitat potentially occurs within the survey areas sites based on aerial imagery. | Known – Recorded during the field survey via call recordings on all survey sites. Likely to roost in tree hollows on all sites. | ALA |
| *Saccolaimus saccolaimus nudicluniatus* | Bare-rumped Sheathtail Bat | VU | | The Bare-rumped Sheath-tail Bat occurs mostly in lowland areas, typically in a range of woodland, forest and open environments (DotE 2016). The Bare-rumped Sheath-tail Bat has been suggested to forage over habitat edges such as the edge of rainforest and in forest clearings (Churchill 1998). There is no information is available on foraging habitat shifts between the dry and wet seasons. The small number of confirmed roosts located in Australia have all been in tree hollows. Overseas other subspecies (perhaps distinct species to the form(s) occurring in Australia) commonly roost in caves, overhangs and man-made structures. However, in Australia no individuals have been found roosting in caves. For example, a survey conducted of about 1000 coastal caves in the Wet Tropics region failed to locate this species (DotE 2016). In 2011, morphological analyses of four S. flaviventris specimens held at the WAM indicated that they had been misidentified and are likely to belong to the species S. saccolaimus (Milne pers. comm., 2013). The bare-rumped sheath-tail bat is therefore likely to be | Unlikely – not verified as occurring in Kimberley region WA and would require genetic and locality confirmation. | Unlikely – not verified as occurring in Kimberley region WA and would require genetic and locality confirmation. | PMST |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | distributed through the Kimberley region of WA as far west as Broome, however this has not been confirmed through genetic analyses (Milne pers. comm., 2013). The DCCEEW species profile website states that 'there are differing opinions regarding the taxonomic status of the Bare-rumped Sheathtail Bat in Australia and taxonomic clarification is required'. | | | |
| *Trichosurus vulpecula arnhemensis* | Northern Brush-tailed Possum | VU | VU | A nocturnal and arboreal species that inhabits forests and tall woodlands of the monsoon tropics of the Kimberley and Top End typically in areas with adequate dense canopy density allowing the possum some arboreal habitat connectivity via canopy tree foliage. It feeds primarily on foliage, blossom and fruits, but will also forage on ground for invertebrates (Menkhorst and Knight 2004). Shelters in tree hollow. This species adapts well to rural and urban habitats (Ganslosser et.al 1991) although appears to be in general decline (Woinarski 2004). | Unlikely – No local or few regional records. | Likely – potentially suitable habitat, namely moderately closed canopy cover found on survey area sites O, C, D and I. | PMST |
| *Xeromys myoides* | Water Mouse | VU | VU | This small rodent has dark grey silky fur above white below. Three separate populations are known: (Northern Territory, central south Queensland, south-east Queensland). Habitat Includes mangroves, saltmarsh, sedgelands, clay pans, heathlands and freshwater wetlands. Not known to occur in WA (Van Dyck and Strahan 2008). | Highly unlikely – not recorded in Kimberley region WA. | Highly unlikely – not recorded in Kimberley region WA. | PMST, ALA |
| **REPTILES** | | | | | | | |
| *Crocodylus porosus* | Saltwater Crocodile | MI | MI | The Saltwater Crocodile is the world's largest living crocodilian (Wilson and Swan, 2017) with a distribution ranging from northern Western Australia through to Queensland and occupying areas of the adjacent Indian and Pacific Oceans. Their habitat includes coastal rivers, swamps, inland drainage systems, estuaries and coastal areas (Wilson and Swan, 2017). Occasionally they have been recorded in the open ocean (Wilson and Swan,2017). | Unlikely – based on desktop assessment and aerial imagery, the survey area sites lack suitable habitat. | Unlikely – the survey area assessed during site visits as not suitable, i.e. lacking coastal, estuarine or rivers. | PMST |
| *Tiliqua scincoides intermedia* | Northern Blue-tongue Skink | CR | - | A large, heavily-built skink species reaching 40cm in length and with greatly enlarged, long temporal scales. Distinct bands are present across the body and are broken into variegations and yellow to orange colour flushed between (Wilson & Swan, 2013). | Likely – known to occur locally and records exist for Derby area. | Known – recorded at sites P, C & O. Confirmed via sighting and tracks. Highly likely to occur on | PMST |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | The sub-species *T.scincoides.intermedia* is confined to the Northern band of the country in arid and open woodland and scrub vegetation (Wilson & Swan, 2013). | | remaining sites D and I. | |
| *Varanus mertensi* | Merten's Water Monitor | EN | - | This species is a moderately large, semi-aquatic monitor growing to a total length of up to 1 m. It is dark brown to black above, with numerous small, dark-edged cream or yellow spots. The lower lip is yellowish and speckled or barred with grey. The underside is white to yellowish with some grey markings on the throat and chest. The tail, which is about 1.5 times as long as the body, is strongly laterally compressed and has a strong two-keeled crest along the top Wilson & Swan, 2013).<br>The species is typically found along watercourses and lagoons through the top Northern sections of Australia, from the Kimberley region of Western Australia to Cape York in Queensland (Wilson & Swan, 2013). | Unlikely – The survey area is beyond the western limit of the species' range based on desktop assessment and aerial imagery shows the survey area sites lack suitable riparian or wetland habitat. | Unlikely – the survey area assessed during site visits as not suitable, i.e. lacking suitable wetland or riparian habitat. | PMST |
| *Varanus mitchelli* | Mitchell's Water Monitor | CR | - | Mitchell's water monitor is a slender, medium-sized varanid reaching 70cm in length, with a strongly laterally compressed tail, and a throat pattern comprising of black spots and bars (Wilson & Swan 2013).<br>The species is typically found in well-vegetated swamps and lagoons from the Kimberley region to the edge of North-West Queensland (Wilson & Swan, 2013). | Unlikely – The survey area is beyond the western limit of the species' range based on desktop assessment and aerial imagery shows the survey area sites lack suitable riparian or wetland habitat. | Unlikely – the survey area assessed during site visits as not suitable, i.e. lacking suitable wetland or riparian habitat. | PMST |
| Amphibians | | | | | | | |
| Uperoleia minima | Small Toadlet | | P3 | Despite the name 'toadlet' this is a ground frog. They have limited ability to hop and swim unlike their more orthodox hylid cousins, however that are good diggers and crawlers. Known to occur in Mitchell Plateau region. There is a local record from Derby lodged wit WA Museum as a 'confirmed' call recording only (not lodged specimen) therefore the verification of this record is uncertain. | Unlikely – the survey area sites are located beyond the western edge of accepted distribution. A database record or call recording cannot has not been verified. | Unlikely – the survey area sites are located beyond the western edge of accepted distribution. A database record or call recording cannot has not been verified. The survey area lacks | DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within survey. Derby Sites C, D, I, O, P | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | | | suitable habitat, namely floodplain supporting dense grassland. | |

**Fauna likelihood of occurrence assessment – Camballin/Looma site**

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within Camballin survey area | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| **BIRDS** | | | | | | | |
| *Actitis hypoleucos* | Common Sandpiper | MI | MI | The species utilizes a wide range of coastal wetlands and some inland wetlands, with varying levels of salinity, and is mostly found around muddy margins or rocky shores and rarely on mudflats. The Common Sandpiper has been recorded in estuaries and deltas of streams, as well as on banks farther upstream; around lakes, pools, billabongs, reservoirs, dams and claypans, and occasionally piers and jetties. Generally the species forages in shallow water and on bare soft mud at the edges of wetlands; often where obstacles project from substrate, e.g. rocks or mangrove roots. Birds sometimes venture into grassy areas adjoining wetlands (Higgins & Davies 1996). | Unlikely – Based on aerial imagery. The survey area lacks suitable wetland habitat. | Highly unlikely – no suitable habitat present based on field assessment. | PMST, Naturemap, DBCA |
| *Apus pacificus* | Fork-tailed Swift | MI | MI | The Fork-tailed Swift is common in coastal and sub coastal areas between Carnarvon and Augusta including near and offshore islands. There are scattered records along south coast from Denmark east to Cocklebiddy on the Great Australian Bight, and sparsely scattered records inland. They are found across a range of habitats, from inland open plains to wooded areas. They are most often observed over inland plains in Australia, but sometimes recorded over coastal cliffs and beaches as well as urban areas. They have been recorded well out to sea as well as from offshore islands especially when on passage from Indonesia. This species is almost exclusively aerial (DCCEEW 2022). | Likely – known to occur locally during seasonal non-breeding visitation. | Likely – known to occur locally during seasonal non-breeding visitation, Likely to occur at least on occasional basis foraging aerially over the survey area. | PMST |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within Camballin survey area | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| *Calidris acuminata* | Sharp-tailed sandpiper | VU | VU | In Australasia, the Sharp-tailed Sandpiper prefers muddy edges of shallow fresh or brackish wetlands, with inundated or emergent sedges, grass, saltmarsh or other low vegetation. This includes lagoons, swamps, lakes and pools near the coast, and dams, waterholes, soaks, bore drains and bore swamps, saltpans and hypersaline saltlakes inland. They also occur in saltworks and sewage farms. They use flooded paddocks, sedgelands and other ephemeral wetlands, but leave when they dry (DCCEEW 2022). | Unlikely – Based on aerial imagery. The survey area lacks suitable wetland habitat. | Highly unlikely – no suitable habitat present based on field assessment. | PMST, Naturemap, DBCA |
| *Calidris alba* | Sanderling | MI | MI | In Australia, the species is almost always found on the coast, mostly on open sandy beaches exposed to open sea-swell, and also on exposed sandbars and spits, and shingle banks, where they forage in the wave-wash zone and amongst rotting seaweed. Sanderlings also occur on beaches that may contain wave-washed rocky outcrops. Less often the species occurs on more sheltered sandy shorelines of estuaries, inlets and harbours (DEE 2019b). | Unlikely – Based on aerial imagery. The survey area lacks suitable wetland habitat. | Highly unlikely – no wetland habitat present based on field assessment. | |
| *Calidris ferruginea* | Curlew Sandpiper | CR | CR | Curlew Sandpipers mainly occur on intertidal mudflats in sheltered coastal areas, such as estuaries, bays, inlets and lagoons, and also around non-tidal swamps, lakes and lagoons near the coast, and ponds in saltworks and sewage farms. They are also recorded inland, though less often, including around ephemeral and permanent lakes, dams, waterholes and bore drains, usually with bare edges of mud or sand. They occur in both fresh and brackish waters. Occasionally they are recorded around floodwaters (DCCEEW 2023). | Unlikely – Based on aerial imagery. The survey area lacks suitable wetland habitat. | Highly unlikely – no suitable habitat present based on field assessment. | PMST, NatureMap, DBCA |
| *Calidris melanotos* | Pectoral Sandpiper | MI | MI | In Australasia, the Pectoral Sandpiper prefers shallow fresh to saline wetlands. The species is found at coastal lagoons, estuaries, bays, swamps, lakes, inundated grasslands, saltmarshes, river pools, creeks, floodplains and artificial wetlands. The species is usually found in coastal or near coastal habitat but occasionally found further inland. It prefers wetlands that have open fringing mudflats and low, emergent or fringing vegetation, such as grass or samphire. The species has also been recorded in swamp overgrown with lignum. They forage in shallow water or soft mud at the edge of wetlands (Higgins & Davies 1996). | Unlikely – Based on aerial imagery. The survey area lacks suitable wetland habitat. | Highly unlikely – no wetland habitat present based on field assessment. | PMST |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within Camballin survey area | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| *Calidris ruficollis* | Red-necked Stint | MI | MI | The Red-necked Stint breeds in north-eastern Siberia and northern and western Alaska. It follows the East Asian-Australasian Flyway to spend the southern summer months in Australia. It is found widely in Australia, except in the arid inland. In Australia, Red-necked Stints are found on the coast, in sheltered inlets, bays, lagoons, estuaries, intertidal mudflats and protected sandy or coralline shores (Pizzey and Knight 2012). | Unlikely – Based on aerial imagery. The survey area lacks suitable wetland habitat. | Highly unlikely – no wetland habitat present based on field assessment. | Naturemap, DBCA |
| *Calidris subminuta* | Long-toed Stint | MI | MI | In WA the species is found mainly along the coast, with a few scattered inland records. On the south coast the Long-toed Stint is found from Esperance to Albany and inland to Lake Cassencarry and Dumbleyung. On the south-west coast the species is known from the Vasse River estuary, Guraga Lake and the Namming Nature Reserve. The species has occasionally been recorded in the Gascoyne Region, around Lake Wooleen, Meeberrie Station and McNeill Claypan. It is widespread around the Pilbara region and the Kimberley Division between Karratha and Wyndham-Kununurra (DEE 2019b). It occurs in a variety of terrestrial wetlands. They prefer shallow freshwater or brackish wetlands including lakes, swamps, river floodplains, streams, lagoons and sewage ponds. | Unlikely – Based on aerial imagery. The survey area lacks suitable wetland habitat. | Highly unlikely – no wetland habitat present based on field assessment. | Naturemap, DBCA |
| *Charadrius veredus* | Oriental Plover | MI | MI | In non-breeding grounds in Australia, this species usually occurs in coastal littoral and estuarine environments. It inhabits large intertidal sandflats or mudflats in sheltered bays, harbours and estuaries, and occasionally sandy ocean beaches, coral reefs, wave-cut rock platforms and rocky outcrops. In north-western Australia, the species appears to use the Port Hedland saltworks in preference to nearby beaches. The species is seldom recorded away from the coast, at margins of lakes, soaks and swamps associated with artesian bores (Marchant & Higgins 1993). | Unlikely – Based on aerial imagery. The survey area lacks suitable wetland habitat. | Highly unlikely – no wetland habitat present based on field assessment. | PMST |
| *Chlidonias leucopterus* | white-winged black tern | MI | MI | White-winged Black Terns are non-breeding migrants to Australia from the North. They arrive anywhere along the tropical coast of Australia and disperse around basically the entire Australian seaboard, including the East coast of Tasmania and many small offshore islands. They can be found farther inland, in parts of the Great Dividing Range and in particular in the central part of the Murray-Darling Basin near the NSW/VIC border. There are also White-winged | Unlikely – Based on aerial imagery. The survey area lacks suitable wetland habitat. | Highly unlikely – no wetland habitat present based on field assessment. | |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within Camballin survey area | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | Black Terns in an area around Perth, WA. Elsewhere on the continent White-winged Black Terns are found only rarely, and never in the great deserts of WA/SA/NT or the Nullarbor. White-winged Black Terns live around lakes including ephemeral lakes, in estuaries and in coastal waters. | | | |
| *Cuculus optatus* | Oriental cuckoo | MI | MI | Non-breeding habitat only: monsoonal rainforest, vine thickets, wet sclerophyll forest or open Casuarina, Acacia or Eucalyptus woodlands. Frequently at edges or ecotones between habitat types. Riparian forest is favoured habitat in the Kimberley region. Typically in denser vegetation with more closed canopy (DCCEEW 2023). | Likely – the survey area is within known range. | Unlikely – habitat within the survey area is semi-arid low open shrubland plain and is considered marginal based on preferred habitat. | PMST |
| *Erythrotriorchis radiatus* | Red Goshawk | EN | EN | The Red Goshawk occurs in coastal and sub-coastal areas in wooded and forested lands of tropical and warm-temperate Australia (Marchant & Higgins 1993). Riverine forests are also used frequently. Such habitats typically support high bird numbers and biodiversity, especially medium to large species which the goshawk requires for prey. The Red Goshawk nests in large trees, frequently the tallest and most massive in a tall stand, and nest trees are invariably within 1 km of permanent water (DCCEEW 2023). | Unlikely – the survey area location is considered geographically marginal at the southwestern limit of species' range. | Unlikely – habitat within the survey area is semi-arid low open shrubland plain and is considered marginal based on preferred habitat. | PMST |
| *Chleobia gouldiae* | Gouldian Finch | EN | EN | The Gouldian Finch inhabits open woodlands that are dominated by Eucalyptus trees and support a ground cover of Sorghum and other grasses (Boekel 1980). The critical components of suitable core habitat for the Gouldian Finch appear to be the presence of favoured annual and perennial grasses (especially Sorghum), a nearby source of surface water and, in the breeding season, unburnt hollow-bearing Eucalyptus trees (especially *E. tintinnans*, *E. brevifolia* and *E. leucophloia*) (Higgins et al. 2006). | Likely – habitat and locality considered potentially suitable based on desktop review. | Likely – habitat assessed as suitable for foraging and likely to occur on at least occasional basis. | PMST |
| *Falco hypoleucos* | Grey Falcon | VU | VU | The Grey Falcon is an Australian endemic, usually confined to the arid inland. It inhabits Triodia grassland, Acacia shrubland, and lightly timbered arid woodland (Morcombe 2004). | Likely – habitat and locality considered potentially suitable based on desktop review. | Likely – habitat assessed as suitable for foraging and likely to occur on at least occasional basis. | PMST, Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within Camballin survey area | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| *Falco peregrinus* | Peregrine Falcon | OS | OS | The Peregrine Falcon is found on and near cliffs, gorges, timbered watercourses, riverine environments, wetlands, plains, open woodlands, and pylons and spires of buildings, though less frequently in desert regions (Morcombe 2004; Pizzey and Knight 2012). They are not common but can be found almost anywhere throughout WA (Nevill 2013). | Likely – habitat and locality considered potentially suitable based on desktop review. | Likely – habitat assessed as suitable for foraging and likely to occur on at least occasional basis. | Naturemap, DBCA |
| *Gelochelidon nilotica* | Gull-billed Tern | MI | MI | The Gull-billed Tern is nomadic or migratory species in Australia. Gull-billed Terns are found in freshwater swamps, brackish and salt lakes, beaches and estuarine mudflats, floodwaters, sewage farms, irrigated croplands and grasslands, where resources are favourable. They are only rarely found over the ocean. The Gull-billed Tern. Although essentially an inland species, outside breeding season it shows a distinct preference for saltmarshes and lagoons near the coast. Movements are not fully understood but it is common and widespread in Australia (Morcombe 2004). | Unlikely – Based on aerial imagery. The survey area lacks suitable wetland habitat. | Highly unlikely – no wetland habitat present based on field assessment. | DBCA |
| *Glariola maldivarum* | Oriental pratincole | MI | MI | In non-breeding grounds in Australia, the Oriental Pratincole usually inhabits open plains, floodplains or short grassland (including farmland or airstrips), often with extensive bare areas.<br>They often occur near terrestrial wetlands, such as billabongs, lakes or creeks, and artificial wetlands such as reservoirs, saltworks and sewage farms, especially around the margins. The species also occurs along the coast, inhabiting beaches, mudflats and islands, or around coastal lagoons (Lloyd and Lloyd 1991). | Unlikely – based on aerial imagery, the survey area lacks wetland or open plains. | Highly unlikely – the survey area lacks suitable habitat. | PMST, Naturemap, DBCA |
| *Hirundo rustica* | Barn Swallow | MI | MI | In Australia, the Barn Swallow is recorded in open country in coastal lowlands, often near water, towns and cities. Birds are often sighted perched on overhead wires, and also in or over freshwater wetlands, paperbark Melaleuca woodland, mesophyll shrub thickets and tussock grassland (DEE 2019). | Likely – occurs locally. | Likely - Occurs locally and habitat suitable. Likely to be present on at least occasional basis during non-breeding season. | PMST |
| *Hydropone caspia* | Caspian Tern | MI | MI | The Caspian Tern is mostly found in sheltered coastal embayments (harbours, lagoons, inlets, bays, estuaries and | Unlikely – Based on aerial imagery. The | Highly unlikely – no wetland habitat | Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within Camballin survey area | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | river deltas) and those with sandy or muddy margins are preferred. They also occur on near-coastal or inland terrestrial wetlands that are either fresh or saline, especially lakes (including ephemeral lakes), waterholes, reservoirs, rivers and creeks. They also use artificial wetlands, including reservoirs, sewage ponds and saltworks. In offshore areas the species prefers sheltered situations, particularly near islands, and is rarely seen beyond reefs (DCCEEW 2022). | survey area lacks suitable wetland habitat. | present based on field assessment. | |
| *Limicola falcinellus* | Broad-billed Sandpiper | MI | MI | The Broad-billed Sandpiper occurs in sheltered parts of the coast, favouring estuarine mudflats but also occasionally occur on saltmarshes, shallow freshwater lagoons, saltworks and sewage farms, and in areas with large soft intertidal mudflats, which may have shell or sandbanks nearby. Occasionally they occur on reefs or rocky platforms. They have also been recorded in creeks, swamps and lakes near the coast, particularly those with bare mudflats or sand exposed by receding water. They often favour mud among, or fringed by, mangroves, particularly on the seaward side and sometimes occur in estuaries edged by saltmarsh. They are rarely recorded inland. Foraging occurs on exposed flats of soft mud or wet sand at edges of coastal and near-coastal wetlands, often around channels on mudflats or in accumulated mud in swales between shell banks. In northern Australia, they forage in soft mud near mangroves, but may remain on same muddy section, even though fresher substrate may be exposed by the receding tide. They also forage in shallow water on muddy edges of ponds. They roost on the banks of sheltered sandy, shelly or shingly beaches (Higgins & Davies 1996). They nest on the ground, frequently in the top of a tussock (Cramp 1985). | Unlikely – Based on aerial imagery. The survey area lacks suitable wetland habitat. | Highly unlikely – no wetland habitat present based on field assessment. | Naturemap, DBCA |
| *Malurus coronatus coronatus* | Purple-Crowned Fairy-Wren | EN | EN | The Purple-crowned Fairy-wren (western) occurs along waterways in the Kimberley Division of Western Australia, and east to the Victoria River Downs in the Northern Territory. Its distribution includes parts of the Fitzroy River, Drysdale River, Durack River and Ord River systems in Western Australia (DCCEEW 2023). The Purple-crowned Fairy-wren (western) inhabits dense, riparian vegetation in the wet-dry tropics of Western Australia and the Northern Territory. It is found near permanent rivers and springs (or associated billabongs and swamps), where it occupies dense thickets of *Pandanus aquaticus* or cane-grass and also occurs, less | Unlikely – survey area is considered to be beyond current known range. | Unlikely – survey area is considered to be beyond current known range. | PMST, NatureMap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within Camballin survey area | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | frequently, in rushes and shrubs (DCCEEW 2023). The Purple-crowned Fairy-wren (western) is said to rarely occur more than 10 m from permanent rivers and springs (DCCEEW 2023). | | | |
| *Motacilla cinerea* | Grey Wagtail | MI | MI | European and Asian species. Migrates in winter south to Indonesia and New Guinea. Rarely reaches Australia. Occurs usually near fresh streams, but also on mown grass, ploughed land or near sewerage ponds | Unlikely – Survey areas are beyond occurs as a vagrant in northern WA although several regional records from Broome area. | Unlikely – Survey areas are beyond occurs as a vagrant in northern WA although several regional records from Broome area | PMST |
| *Motacilla flava* | Yellow Wagtail | MI | MI | Occurs in open country near swamps, salt marshes, sewerage ponds, grassed surrounds to airfields, bare ground; occasionally on drier inland plains. Roosts in mangroves and other dense vegetation. Rare but regular visitor around Australia coast, especially the NW coast, Broome to Darwin (Morcombe 2004). | Unlikely – no records from the area | Highly unlikely – no suitable habitat | PMST, ALA |
| *Numenius minutus* | Little curlew | MI | MI | Little Curlews generally spend the non-breeding season in northern Australia from Port Hedland in WA to the Queensland coast (Minton 2002 pers. comm.). There are records of the species from inland Australia, and widespread but scattered records on the east coast. The Little Curlew is most often found feeding in short, dry grassland and sedgeland, including dry floodplains and blacksoil plains, which have scattered, shallow freshwater pools or areas seasonally inundated. Open woodlands with a grassy or burnt understory, dry saltmarshes, coastal swamps, mudflats or sandflats of estuaries or beaches on sheltered coasts, mown lawns, gardens, recreational areas, ovals, racecourses and verges of roads and airstrips are also used (Higgins & Davies 1996). | Unlikely – Based on aerial imagery. The survey area lacks suitable wetland habitat. | Highly unlikely – no wetland habitat present based on field assessment. | DBCA |
| *Numenius phaeopus* | Whimbrel | MI | MI | The Whimbrel is often found on the intertidal mudflats of sheltered coasts. It is also found in harbours, lagoons, estuaries and river deltas, often those with mangroves, but also open, un-vegetated mudflats. It is occasionally found on sandy or rocky beaches, on coral or rocky islets, or on intertidal reefs and platforms. It has been infrequently | Unlikely – Based on aerial imagery. The survey area lacks suitable wetland habitat. | Highly unlikely – no wetland habitat present based on field assessment. | PMST |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within Camballin survey area | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | recorded using saline or brackish lakes near coastal areas. It also used salt flats with saltmarsh, or saline grasslands with standing water left after high spring-tides, and in similar habitats in sewage farms and salt fields (Higgins & Davies 1996). There are a small number of inland records from saline lakes and cane grass swamps. It has also been recorded in coastal dunes and a football field. | | | |
| *Pandion haliaetus* | Osprey | MI | MI | The breeding range of the Osprey extends around the northern coast of Australia (including many offshore islands) from Albany in WA to Lake Macquarie in NSW; with a second isolated breeding population on the coast of South Australia, extending from Head of Bight east to Cape Spencer and Kangaroo Island. Eastern Ospreys occur in littoral and coastal habitats and terrestrial wetlands of tropical and temperate Australia and offshore islands (DCCEEW 2022). | Unlikely – Based on aerial imagery. The survey area lacks suitable wetland habitat. | Highly unlikely – no wetland habitat present based on field assessment. | PMST, Naturemap, DBCA. |
| *Pezoporus occidentalis* | Night Parrot | EN | EN | Night Parrots usually inhabit arid or semi-arid grasslands that are dominated by spinifex, though they have also been recorded in shrublands dominated by samphire, bluebush and saltbush (Morcombe 2006). | Unlikely – Survey area and wider Fitzroy Trough is not considered to be a high priority bioregion for this species. | Unlikely – habitat assessment indicate that the survey sites are not considered as suitable roosting or breeding habitat based on lack of large of Triodia hummocks. | PMST |
| *Plegadis falcinellus* | Glossy Ibis | MI | MI | Flocks congregate and roost on dead trees near water. Uses shallows of swamps, floodwaters, sewerage ponds, flooded, moist or irrigated pasture; occasionally feeds in sheltered marine habitats. Common across coastal North, less common elsewhere (Morcombe 2004). | Unlikely – Based on aerial imagery. The survey area lacks suitable wetland habitat. | Highly unlikely – no wetland habitat present based on field assessment. | Naturemap, DBCA |
| *Pluvialis fulva* | Pacific Golden Plover | MI | MI | The Pacific Golden Plover breeds on the Arctic tundra in western Alaska. It winters in South America and islands of the Pacific Ocean to India, Indonesia and Australia. In Australia it is widespread along the coastline. Pacific Golden Plovers usually occur on beaches, mudflats and sandflats (sometimes in vegetation such as mangroves, low saltmarsh such as Sarcocornia, or beds of seagrass) in sheltered areas including harbours, estuaries and lagoons, and also in evaporation ponds in saltworks. The species is also | Unlikely – Based on aerial imagery. The survey area lacks suitable wetland habitat. | Highly unlikely – no wetland habitat present based on field assessment. | Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within Camballin survey area | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | sometimes recorded on islands, sand and coral cays and exposed reefs and rocks (DCCEEW 2022). | | | |
| *Polytelis alexandrae* | Princess Parrot | VU | VU | The Princess Parrot is confined to arid regions of Western Australia, the Northern Territory, and South Australia. The Princess Parrot inhabits sand dunes and sand flats in the arid zone of western and central Australia. It occurs in open savannah woodlands and shrublands that usually consist of scattered stands of Eucalyptus (including *E. gongylocarpa, E. chippendalei* and mallee species), *Casuarina* or *Allocasuarina* trees; an understorey of shrubs such as *Acacia* (especially *A. aneura*), *Cassia*, *Eremophila*, *Grevillea*, *Hakea* and *Senna*; and a ground cover dominated by *Triodia* species. It also frequents *Eucalyptus* or *Allocasuarina* trees in riverine or littoral areas (DCCEEW 2023). | Likely – based on distribution and records, likely to occur. | Likely – habitat within survey area is suitable, likely to occur on at lease occasional basis. | PMST |
| *Rostratula australis* | Australian Painted Snipe | EN | EN | The Australian Painted Snipe is restricted to Australia with historical records from around the Perth region in Western Australia. Prefers fringes of swamps, dams and nearby marshy areas where there is a cover of grasses, lignum, low scrub or open timber nests on the ground amongst tall vegetation, such as grasses, tussocks or reeds. The nest consists of a scrape in the ground, lined with grasses and leaves. Breeding is often in response to local conditions; generally occurs from September to December. Incubation and care of young is all undertaken by the male only. Forages nocturnally on mud-flats and in shallow water. Feeds on worms, molluscs, insects and some plant-matter (DCCEEW 2023). | Unlikely – Based on aerial imagery. The survey area lacks suitable wetland habitat. | Highly unlikely – no wetland habitat present based on field assessment. | PMST |
| *Sterna hirundo* | Common Tern | MI | MI | Common Terns are marine, pelagic, and coastal. In Australia, they are recorded in all marine zones, but are commonly observed in near-coastal waters, both on ocean beaches, platforms, and headlands and in sheltered waters, such as bays, harbours, and estuaries with muddy, sandy or rocky shores. However, off Wollongong, NSW, Common Terns were recorded in all marine zones but generally recorded in offshore and pelagic waters, 11–55 km from shore. Occasionally they are recorded in coastal and near-coastal wetlands, either saline or freshwater, including lagoons, rivers, lakes, swamps and saltworks. Sometimes they occur in mangroves or saltmarsh and, in bad weather, in coastal sand-dunes or coastal embayments (Brandis et al. 1992; | Unlikely – Based on aerial imagery. The survey area lacks suitable wetland habitat. | Highly unlikely – no wetland habitat present based on field assessment. | DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within Camballin survey area | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | Chatto 2006; Higgins & Davies 1996; Hitchcock 1965; Morris 1989; Morris et al. 1981, 1990; Wood 1991). | | | |
| *Tringa glareola* | Wood Sandpiper | MI | MI | The Wood Sandpiper uses well-vegetated, shallow, freshwater wetlands, such as swamps, billabongs, lakes, pools and waterholes. They are typically associated with emergent, aquatic plants or grass, and dominated by taller fringing vegetation, such as dense stands of rushes or reeds, shrubs, or dead or live trees, especially Melaleuca and River Red Gums E. camaldulensis. They also frequent inundated grasslands, short herbage or wooded floodplains, where floodwaters are temporary or receding. They can occasionally be found at drying or stony small wetlands, but rarely use brackish wetlands, or dry stunted saltmarsh (Nevill 2013). | Unlikely – Based on aerial imagery. The survey area lacks suitable wetland habitat. | Highly unlikely – no wetland habitat present based on field assessment. | Naturemap, DBCA. |
| *Tringa nebularia* | Common Greenshank | MI | MI | The Common Greenshank is a heavily built, elegant wader, 30–35 cm in length, with a wingspan of 55–65 cm and weight up to 190 g for both males and females. The bill is long and slightly upturned and the legs are long and yellowish-green. In flight, all plumages show uniformly dark upperwing and constrasting white rump extending in a white wedge up the back, whitish tail and tips of toes projecting slightly beyond the tip of the tail. The sexes are alike (Higgins & Davies 1996).<br>The species is seen singly or in small to large flocks (sometimes hundreds) in a variety of coastal and inland wetlands. The Common Greenshank does not breed in Australia, however, the species occurs in all types of wetlands and has the widest distribution of any shorebird in Australia (Higgins & Davies 1996). It occurs around most of the coast from Cape Arid in the south to Carnarvon in the north-west. In the Kimberleys it is recorded in the south-west and the north-east, with isolated records from the Bonaparte Archipelago (Higgins & Davies 1996). | Unlikely – Based on aerial imagery. The survey area lacks suitable wetland habitat. | Highly unlikely – no wetland habitat present based on field assessment. | PMST, Naturemap, DBCA |
| *Tringa stagnatalis* | Little Greenshank, Marsh Sandpiper | MI | MI | The Marsh Sandpiper lives in permanent or ephemeral wetlands of varying salinity, including swamps, lagoons, billabongs, saltpans, saltmarshes, estuaries, pools on inundated floodplains, and intertidal mudflats and also regularly at sewage farms and saltworks. They are recorded less often at reservoirs, waterholes, soaks, bore-drain swamps and flooded inland lakes. In north Australia they | Unlikely – Based on aerial imagery. The survey area lacks suitable wetland habitat. | Highly unlikely – no wetland habitat present based on field assessment. | PMST, Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within Camballin survey area | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | prefer intertidal mudflats (Higgins & Davies 1996), although surveys in Kakadu National Park recorded more birds around shallow .At the Top End they often use ephemeral pools on inundated freshwater and tidal floodplains (Higgins & Davies 1996). | | | |
| **FISH** | | | | | | | |
| *Craterocephalus lentiginosus* | Prince Regent Hardyhead | - | P2 | A dusky golden brown to greenish hardyhead family member, becoming paler below, with a silvery to golden mid-lateral stripe, a black stripe from the snout through the eye to the pectoral-fin base, and a black spot on most body scales. Breeding males have a bright yellow underside (Bray& Thompson, 2022).<br>The species measures 8cm in length and is typically found in freshwater and brackish systems in the Northern Kimberley (Bray & Thompson, 2022). | Unlikely – Regional records exist, although based on aerial imagery the survey area lacks suitable habitat, namely major drainage/river habitat. | Highly unlikely – no river or drainage habitat present based on field assessment. | NatureMap, DBCA |
| *Hannia greenwayi* | Greenways' Grunter | - | P1 | A small slender golden to silvery-grey grunter species with large dark-edged scales and a lower part of the caudal fin. Juveniles have a dark spot at the soft dorsal and anal-fin bases. Large adults may have thick blubbery lips, and captured individuals may appear to have broad vertical bars.<br>The species measures up to 14cm in length and is typically found in freshwater streams of the North Kimberley (Gomon & Bray, 2021). | Highly unlikely – The survey area is located beyond the western limit of species' range. | Highly unlikely – The survey area is located beyond the western limit of species' range, and lack of drainage or river habitat present. | Naturemap, DBCA |
| *Pristis pristis* | Large-tooth Sawfish | VU | P3 | The Freshwater Sawfish is a ray growing to 7 m, having five pairs of gill-openings on the ventral surface of the head; a distinguishing feature of rays. It has less than 20 teeth on each side of its saw (Allen 1989a; Phillips et al. 2008).<br>The Freshwater Sawfish may potentially occur in all large rivers of northern Australia from the Fitzroy River, Western Australia, to the western side of Cape York Peninsula, Queensland. It is mainly confined to the main channels of large rivers (Allen 2000, pers. comm.).<br>The species is known from several drainages of northern Australia including the Fitzroy River, Durack River and Ord River in Western Australia; the Adelaide River, Victoria River and Daly River of the Northern Territory; and the Gilbert River, Mitchell River, Norman River and Leichhardt River of Queensland (Last & Stevens 1994). The species is also | Highly unlikely – The survey area is located beyond the western limit of species' range and lacks estuarine or riverine habitat. | Highly unlikely – The survey area is located beyond the western limit of species' range and lacks estuarine or riverine habitat. | PMST, NatureMap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within Camballin survey area | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | recorded from the McArthur River, Northern Territory (Merrick & Schmida 1984). In the Fitzroy River catchment it is probably confined to the main Fitzroy River; in the Durack River catchment it probably only occurs in the main Durack River; in the Ord River catchment it occurs only in the Main Ord Channel below Kununurra Dam and in the Pentecost River; and in the Victoria River catchment it is probably restricted to the main Victoria River and possibly Fitzmaurice River (Allen 2000, pers. comm.). | | | |
| **MAMMALS** | | | | | | | |
| *Dasyurus hallucatus* | Northern Quoll | EN | EN | The Northern Quoll is the smallest of the four Australian quoll species. It has a pointy snout and reddish brown fur, with a cream underside. It has white spots on its back and rump and a long, sparsely-furred, unspotted tail (Oakwood 2008). The tail length ranges between 202 and 345 mm. The hindfeet have striated pads and five toes (Oakwood 2008). Northern Quolls can weigh up to 1.2 kg, with the males (usually between 400 to 900 g) (Braithwaite & Begg 1995) being larger than the females (usually 300 to 500 g) (Braithwaite & Begg 1995, TSSC 2005).<br>In the Kimberley, records are scattered discontinuously from just south of Derby across to Wyndham. Declines are known from lowland areas and/or the semi-arid inland fringes of its range e.g. the south-west Kimberley (McKenzie 1981) and Purnululu National Park in south-east Kimberley (Woinarski 1992). | Highly unlikely – Not known to occur within the location of the survey area or wider region. | Highly unlikely – Not known to occur within the location of the survey area or wider region. | PMST |
| *Hydromys chrysogaster* | Water-rat, Rakali | - | P4 | The Water-rat is one of Australia's largest rodents and is usually found near permanent bodies of fresh or brackish water. The Water-rat is one of Australia's only two amphibious mammals (the platypus is the other). They live in burrows alongside river and lake banks. | Highly unlikely – Not known to occur within the location of the survey area or wider region. | Highly unlikely – Not known to occur within the location of the survey area or wider region, and lack of riparian habitat within the survey area. | DBCA |
| *Lagorchestes conspicillatus leichardti* | Spectacled hare-wallaby (mainland) | - | P4 | The Spectacled Hare-wallaby (Barrow Island), is a small wallaby with a conspicuous orange ring around its eyes. Its back and sides are covered with brown fur with white tips, and its underside is white. The tail fur is grey-brown with dark tips, and the feet are pale grey-brown. The specific | Unlikely – There is a historical regional record from 1950s, about 35 km NE of survey area, and | Unlikely – There is a several regional records. Habitat within survey area lacks low dense | DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within Camballin survey area | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | subspecies, *L. conspicillatus leichardti,* occurs on the mainland, where it is considered rare and scattered in Western Australia, but more common in the Northern Territory and Queensland (Ingleby, 1991), where it inhabits open forests, woodlands, shrublands, and hummock grasslands, preferring areas where there is a mosaic of vegetation due to differences in fire history (Ingleby, 1991). | several other records 40 km NW close to Fitzroy Rv system. | vegetation structure, and marginal at best. | |
| *Leggadina lakedownensis* | Northern short-tailed mouse / Lakeland Downs mouse | - | P4 | A small, short-tailed rodent that has been recorded from a range of habitats such as tussock grasslands in northern Australian and stony clay hummock grasslands (Pilbara). Cryptic. Ecology poorly documented. | Likely – based on distribution and predicted habitat within survey area. | Likely – habitat appears suitable: sandplain with tussock and hummock grasses and sparse shrubland. | DBCA |
| *Macroderma gigas* | Ghost Bat | VU | VU | The Ghost Bat occurs in a wide range of habitats, and requires an undisturbed cave, deep fissure or disused mine shaft in which to roost. It is patchily distributed across Australia, and is sensitive to disturbance (Van Dyck and Strahan 2008). | Likely – there are two regional historical records (Kind Leopold Ranges area). Aerial imagery shows extensive rocky breakaway (potential roost cave habitat) | Likely – no suitable roost habitat within survey area, however extensive potential roost habitat (rocky breakaway) in proximity to west. Likely to occur (foraging) on at least occasional basis. | PMST |
| *Macrotis lagotis* | Bilby | VU | VU | The Bilby usually spends the daytime in burrows, often built against termite mounds, spinifex hummock or shrubs (Van Dyck and Strahan 2008). The Bilby occupies three major vegetation types; open tussock grassland on uplands and hills, mulga woodland/shrubland growing on ridges and rises, and hummock grassland in plains and alluvial areas. In the south of its range, the Bilby lives on rises and ridges among sparse grasses, especially mitchell grass Astrebla and short shrubs. In Western Australia there are disjunct populations in the Gibson Desert, south-western Kimberley, inland areas of the Pilbara and northern Great Sandy Desert. The current occurrence of this species is strongly associated with higher rainfall and temperatures, which promote areas of higher plant and food production (DCCEEW 2023). | Likely – the survey area is marginal geographically however may to occur regionally based on aerial imagery showing the survey area in on the southern edge of extensive sandplain and dunes. | Likely – to occur on at least an occasional basis based on potentially suitable foraging habitat present. | PMST |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within Camballin survey area | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| *Petrogale lateralis kimberleyensis* | West Kimberley Rock-Wallaby, Wiliji | EN | EN | This species is well adapted to life on steep rocks, with very textured feet that help it grip and a long, strong tail to give it balance. The species is patchily distributed across the western half of Australia. Populations are scattered and restricted to sites with suitable rocky habitat with caves and crevices. Four vulnerable subspecies are in the EPBC threatened list. Specifically, the *Petrogale lateralis kimberleyensis* west Kimberley race or the west Kimberley rock-wallaby occurs solely in the west Kimberley. | Likely – there are records to the northeast and southwest. Aerial imagery shows extensive rocky breakaway (potential habitat). | Likely – to occur on at least an occasional basis based on potentially suitable rocky habitat in proximity and foraging habitat | PMST |
| *Petrogale lateralis lateralis* | Black-footed Rock-Wallaby | EN | EN | This species is well adapted to life on steep rocks, with very textured feet that help it grip and a long, strong tail to give it balance. The species is patchily distributed across the western half of Australia. Populations are scattered and restricted to sites with suitable rocky habitat with caves and crevices. Four vulnerable subspecies are in the EPBC threatened list. Specifically, the nominate sub-species, *Petrogale lateralis lateralis* occurs as remnant populations in the Pilbara, Exmouth, mid-west and eastern Wheatbelt. | Highly unlikely – the survey area is outside the species' distribution. | Highly unlikely – the survey area is outside the species' distribution. | DBCA |
| *Trichosurus vulpecula arnhemensis* | Northern Brush-tailed Possum | VU | VU | A nocturnal and arboreal species that inhabits forests and tall woodlands of the monsoon tropics of the Kimberley and Top End typically in areas with adequate dense canopy density allowing the possum some arboreal habitat connectivity via canopy tree foliage. It feeds primarily on foliage, blossom and fruits, but will also forage on ground for invertebrates (Menkhorst and Knight 2004). Shelters in tree hollow. This species adapts well to rural and urban habitats (Ganslosser et.al 1991) although appears to be in general decline (Woinarski 2004). | Unlikely – few regional records. | Unlikely – the survey area lacks suitable vegetation canopy structure and lacks potential rocky shelter habitat. | PMST |
| *Vespadelus douglasorum* | Yellow-lipped cave bat | - | P2 | Small microbat species, confined to the Western Kimberley mostly in relatively high rainfall areas (> 800mm). Forages in woodlands, particularly riparian vegetation in proximity to rocky habitat where in will roost in caves and crevices. | Likely - locally recorded, within 10 km of survey area. | Likely – extensive rocky breakaway (possible roost habitat) located in close proximity of survey area, therefore likely to roost nearby and forage within survey area. | NatureMap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within Camballin survey area | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| **REPTILES** | | | | | | | |
| *Ctenotus uber johnstonei* | Spotted Ctenotus (northeast) | - | P2 | A striped and spotted skink. Habitat preferences are not well understood. Has been recorded in chenopod shrubland near sandstone hills (Wilson and Swan 2013). | Unlikely – closest records are 40-50 km east of the survey area. | Unlikely based on lack or local records and paucity of information of available on habitat preferences. | |
| *Crocodylus johnstoni* | Freshwater crocodile | - | OS | Freshwater crocodiles are widespread across northern Australia and occur in permanent freshwater rivers, gorges and billabongs (Wilson and Swan, 2017). The species can persist in small seasonal creeks that have pools present year round. Typically the species is abundant where habitat is available however has been severely impacted by the invasion of Cane Toads into the Kimberley. | Highly unlikely – based on lack or riverine habitat based on aerial imagery. | Highly unlikely – no suitable habitat within survey area. | DBCA, NatureMap |
| *Crocodylus porosus* | Saltwater Crocodile | MI | MI | The Salt-water Crocodile is the largest species of crocodile and the largest living reptile in the world. The species is sexually dimorphic (sexes are physically different); adult males are on average 5 m long and weigh more than 450 kg, whereas females are much smaller, generally around 3 m long and up to 150 kg. In Western Australia the species is found in most major river systems of the Kimberley, including the Ord, Patrick, Forrest, Durack, King, Pentecost, Prince Regent, Lawley, Mitchell, Hunter, Roe and Glenelg Rivers. It is also found in Parrys Creek. The largest populations occur in the rivers draining into the Cambridge Gulf and the Prince Regent River and Roe River systems. There have also been isolated records in rivers of the Pilbara region, around Derby near Broome and as far south as Carnarvon on the mid-west coast (DEC 2009a). | Highly unlikely – based on lack or riverine/estuarine habitat based on aerial imagery. | Highly unlikely – no suitable habitat within survey area. | PMST |
| *Liopholis kintorei* | Great Desert Skink | VU | VU | The Great Desert Skink occurs on arid sand-flats and clay-based or loamy soils vegetated with spinifex (Wilson and Swan 2010). Populations in the Gibson Desert occur on sandplains with a surface cover of fine gravel (Pearson et al. 2001). Vegetation usually consists of hummock grassland (Triodia basedowii, Triodia pungens and Triodia schinzii), with some scattered shrubs and occasional trees (e.g. Acacia spp., Eucalyptus spp., Hakea spp., Grevillea spp. and Allocasuarina decaisneana) (McAlpin 2001). Sites in WA are dominated by Triodia basedowii and Triodia schinzii with | Highly unlikely – not known to occur locally or regionally. | Highly unlikely – not known to occur locally or regionally. | PMST |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within Camballin survey area | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | some Eremophila leucophylla shrubs (Pearson et al. 2001). The population at Patjarr WA occurs on a gravelly undulating plain with scattered Black Gidgee (Acacia pruinocarpa) or Mulga over Triodia basedowii and low shrubs (McAlpin 2001). | | | |
| *Tiliqua scincoides intermedia* | Northern Blue-tongue skink | CR | - | A large, heavily-built skink species reaching 40cm in length and with greatly enlarged, long temporal scales. Distinct bands are present across the body and are broken into variegations and yellow to orange colour flushed between (Wilson & Swan, 2013).<br>The sub-species *T.scincoides.intermedia* is confined to the Northern band of the country in arid and open woodland and scrub vegetation (Wilson & Swan, 2013). | Likely – The survey area is located within the southern extent of this species' known range. Notwithstanding, likely to occur locally. | Likely – potentially suitable habitat | PMST |
| *Varanus mertensii* | Merten's water monitor | EN | - | This species is a moderately large, semi-aquatic monitor growing to a total length of up to 1 m. It is dark brown to black above, with numerous small, dark-edged cream or yellow spots. The lower lip is yellowish and speckled or barred with grey. The underside is white to yellowish with some grey markings on the throat and chest. The tail, which is about 1.5 times as long as the body, is strongly laterally compressed and has a strong two-keeled crest along the top Wilson & Swan, 2013).<br>The species is typically found along watercourses and lagoons through the top Northern sections of Australia, from the Kimberley region of Western Australia to Cape York in Queensland (Wilson & Swan, 2013). | Highly unlikely – based on geographic range of species and lack or riverine habitat based on aerial imagery. | Highly unlikely – survey area is beyond species' range and no suitable habitat within survey area. | PMST |
| *Varanus mitchelli* | Mitchell's Water Monitor | CR | - | Mitchell's water monitor is a slender, medium-sized varanid reaching 70cm in length, with a strongly laterally compressed tail, and a throat pattern comprising of black spots and bars (Wilson & Swan 2013).<br>The species is typically found in well-vegetated swamps and lagoons from the Kimberley region to the edge of North-West Queensland (Wilson & Swan, 2013). | Highly unlikely – based on geographic range of species and lack or riverine habitat based on aerial imagery. | Highly unlikely – survey area is beyond species' range and no suitable habitat within survey area. | PMST |
| **Amphibia** | | | | | | | |
| *Uperoleia minima* | Small toadlet (Mitchell Plateau) | - | P3 | Despite the name 'toadlet' this is a ground frog. They have limited ability to hop and swim unlike their more orthodox hylid cousins, however that are good diggers and crawlers. Known to occur in Mitchell Plateau region. Based on very | Unlikely – Due to apparent lack of flooded grassland habitat within survey | Unlikely – The survey area is considered marginal habitat at best as it lacks any drainage | DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence within Camballin survey area | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | limited ecological information, habitat preference is ‘dense grassland subject to flooding’ (Tyler and Doughty 2009). There are several database records based on or call recording. | area based on aerial imagery. | areas or flooded grassland habitat. | |

**Fauna likelihood of occurrence assessment – Hall's Creek sites**

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence - Hall's Creek sites C, C3 and Connection Route | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| BIRDS | | | | | | | |
| *Actitis hypoleucos* | Common Sandpiper | MI | MI | The species utilizes a wide range of coastal wetlands and some inland wetlands, with varying levels of salinity, and is mostly found around muddy margins or rocky shores and rarely on mudflats. The Common Sandpiper has been recorded in estuaries and deltas of streams, as well as on banks farther upstream; around lakes, pools, billabongs, reservoirs, dams and claypans, and occasionally piers and jetties. Generally the species forages in shallow water and on bare soft mud at the edges of wetlands; often where obstacles project from substrate, e.g. rocks or mangrove roots. Birds sometimes venture into grassy areas adjoining wetlands (Higgins & Davies 1996). | Unlikely - Known to occur regionally however based on aerial imagery, the survey area lacks suitable wetland habitat. | Unlikely - The survey area lacks suitable wetland habitat, both permanent or temporary water bodies. Minor drainage lines are considered unsuitable. | PMST, Naturemap, DBCA |
| *Apus pacificus* | Fork-tailed Swift | MI | MI | The Fork-tailed Swift is common in coastal and sub coastal areas between Carnarvon and Augusta including near and offshore islands. There are scattered records along south coast from Denmark east to Cocklebiddy on the Great Australian Bight, and sparsely scattered records inland. They are found across a range of habitats, from inland open plains to wooded areas. They are most often observed over inland plains in Australia, but sometimes recorded over coastal cliffs and beaches as well as urban areas. They have been recorded well out to sea as well as from offshore islands especially when on passage from Indonesia. This species is almost exclusively aerial (DCCEEW 2022). | Unlikely - Known to occur regionally however based on aerial imagery, the survey area lacks suitable wetland habitat. | Unlikely - The survey area lacks suitable wetland habitat, both permanent or temporary water bodies. Minor drainage lines are considered unsuitable. | PMST, Naturemap, DBCA |
| *Calidris acuminata* | Sharp-tailed Sandpiper | VU | MI | In Australasia, the Sharp-tailed Sandpiper prefers muddy edges of shallow fresh or brackish wetlands, with inundated or emergent sedges, grass, saltmarsh or other low vegetation. This includes lagoons, swamps, lakes and pools near the coast, and dams, waterholes, soaks, bore drains and bore swamps, saltpans and hypersaline saltlakes inland. They also occur in saltworks and sewage farms. They use flooded paddocks, sedgelands and other ephemeral wetlands, but leave when they dry (DCCEEW 2022). | Unlikely - Known to occur regionally however based on aerial imagery, the survey area lacks suitable wetland habitat. | Unlikely - The survey area lacks suitable wetland habitat, both permanent or temporary water bodies. Minor drainage lines are considered unsuitable. | PMST, Naturemap, DBCA |
| *Calidris ferruginea* | Curlew Sandpiper | CR | CR | Curlew Sandpipers mainly occur on intertidal mudflats in sheltered coastal areas, such as estuaries, bays, inlets and lagoons, and also around non-tidal swamps, lakes and lagoons near the coast, and ponds in saltworks and sewage farms. They are also recorded inland, though less often, including around ephemeral and permanent lakes, dams, waterholes and bore drains, usually with bare edges of mud or sand. They occur in both fresh and brackish | Unlikely - Known to occur regionally however based on aerial imagery, the survey area lacks suitable wetland habitat. | Unlikely - The survey area lacks suitable wetland habitat, both permanent or temporary water bodies. Minor | PMST, Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence - Hall's Creek sites C, C3 and Connection Route | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | waters. Occasionally they are recorded around floodwaters (DCCEEW 2023). | | drainage lines are considered unsuitable. | |
| *Calidris melanotos* | Pectoral Sandpiper | MI | MI | In Australasia, the Pectoral Sandpiper prefers shallow fresh to saline wetlands. The species is found at coastal lagoons, estuaries, bays, swamps, lakes, inundated grasslands, saltmarshes, river pools, creeks, floodplains and artificial wetlands. The species is usually found in coastal or near coastal habitat but occasionally found further inland. It prefers wetlands that have open fringing mudflats and low, emergent or fringing vegetation, such as grass or samphire. The species has also been recorded in swamp overgrown with lignum. They forage in shallow water or soft mud at the edge of wetlands (Higgins & Davies 1996). | Unlikely - Known to occur regionally however based on aerial imagery, the survey area lacks suitable wetland habitat. | Unlikely - The survey area lacks suitable wetland habitat, both permanent or temporary water bodies. Minor drainage lines are considered unsuitable. | PMST, Naturemap, DBCA |
| *Charadrius veredus* | Oriental Plover | MI | MI | In non-breeding grounds in Australia, this species usually occurs in coastal littoral and estuarine environments. It inhabits large intertidal sandflats or mudflats in sheltered bays, harbours and estuaries, and occasionally sandy ocean beaches, coral reefs, wave-cut rock platforms and rocky outcrops. In north-western Australia, the species appears to use the Port Hedland saltworks in preference to nearby beaches. The species is seldom recorded away from the coast, at margins of lakes, soaks and swamps associated with artesian bores (Marchant & Higgins 1993). | Unlikely - Known to occur regionally however based on aerial imagery, the survey area lacks suitable wetland habitat. | Unlikely - The survey area lacks suitable wetland habitat, both permanent or temporary water bodies. Minor drainage lines are considered unsuitable. | PMST, Naturemap, DBCA |
| *Charadrius leschenaultii* | Greater Sand Plover | VU | VU | In Australia, the Greater Sand Plover occurs in coastal areas in all states, though the greatest numbers occur in northern Australia, especially the north-west (Marchant & Higgins 1993). In northern Australia, the species is especially widespread between North West Cape and Roebuck Bay in WA; there are sparsely scattered records from the largely inaccessible area between Roebuck Bay and Darwin, but it often occurs in the Top End of the Northern Territory, including on Groote Eylandt (DCCEEW 2022). | Unlikely - Known to occur regionally however based on aerial imagery, the survey area lacks suitable wetland habitat. | Unlikely - The survey area lacks suitable wetland habitat, both permanent or temporary water bodies. Minor drainage lines are considered unsuitable. | Naturemap, DBCA |
| *Chlidonias leucopterus* | White-winged tern | MI | MI | White-winged Black Terns are non-breeding migrants to Australia from the North. They arrive anywhere along the tropical coast of Australia and disperse around basically the entire Australian seaboard, including the East coast of Tasmania and many small offshore islands. They can be found farther inland, in parts of the Great Dividing Range and in particular in the central part of the Murray-Darling Basin near the NSW/VIC border. There are also White-winged Black Terns in an area around Perth, WA. Elsewhere on the continent White-winged Black Terns are found only rarely, | Unlikely - Known to occur regionally however based on aerial imagery, the survey area lacks suitable wetland habitat. | Unlikely - The survey area lacks suitable wetland habitat, both permanent or temporary water bodies. Minor drainage lines are | Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence - Hall's Creek sites C, C3 and Connection Route | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | and never in the great deserts of WA/SA/NT or the Nullarbor. White-winged Black Terns live around lakes including ephemeral lakes, in estuaries and in coastal waters. | | considered unsuitable. | |
| *Erythrotriorchis radiatus* | Red Goshawk | EN | EN | The Red Goshawk occurs in coastal and sub-coastal areas in wooded and forested lands of tropical and warm-temperate Australia (Marchant & Higgins 1993). Riverine forests are also used frequently. Such habitats typically support high bird numbers and biodiversity, especially medium to large species which the goshawk requires for prey. The Red Goshawk nests in large trees, frequently the tallest and most massive in a tall stand, and nest trees are invariably within 1 km of permanent water (DCCEEW 2023). | Unlikely – the survey area is located beyond the southern edge of the species' known range. | Unlikely – the survey area is located beyond the southern edge of the species' known range. | PMST |
| *Chleobia gouldiae* | Gouldian Finch | EN | P4 | The Gouldian Finch inhabits open woodlands that are dominated by Eucalyptus trees and support a ground cover of Sorghum and other grasses (Boekel 1980). The critical components of suitable core habitat for the Gouldian Finch appear to be the presence of favoured annual and perennial grasses (especially Sorghum), a nearby source of surface water and, in the breeding season, unburnt hollow-bearing Eucalyptus trees (especially *E. tintinnans*, *E. brevifolia* and *E. leucophloia*) (Higgins et al. 2006). | Likely – there are regional records of this species. | Known – recorded within drainage line habitat with flowing water site C. Highly likely within drainage habitat site C3 and Likely to forage within Connection Route | PMST, Naturemap, DBCA |
| *Falco hypoleucos* | Grey Falcon | VU | VU | The Grey Falcon is an Australian endemic, usually confined to the arid inland. It inhabits Triodia grassland, Acacia shrubland, and lightly timbered arid woodland (Morcombe 2004). | Likely- know to occur locally. | Likely – occurs locally, and suitable foraging habitat present. Likely to occur on at least occasional; basis. | PMST, Naturemap, DBCA |
| *Falco peregrinus* | Peregrine Falcon | - | OS | The Peregrine Falcon is uncommon but wide ranging across Australia. Found everywhere from woodlands to open grasslands and coastal cliffs – though less frequently in desert regions – it feeds almost entirely on other birds. It also eats rabbits and other moderate sized mammals, bats and reptiles. The Peregrine Falcon is very territorial during breeding season, the male courting the female with an impressive display of aerobatics (DEE 2019b, Morcombe 2004). | Likely – known to occur locally. | Likely – suitable foraging habitat occurs within the survey area sites. Likely to occur at least on occasional basis. | DBCA, Naturemap |
| *Gelochelidon nilotica* | Gull-billed tern | MI | MI | The Gull-billed Tern is nomadic or migratory species in Australia. Gull-billed Terns are found in freshwater swamps, brackish and salt lakes, beaches and estuarine mudflats, floodwaters, sewage farms, irrigated croplands and grasslands, where resources are favourable. They are only rarely found over the ocean. The Gull-billed Tern. Although essentially an inland species, outside | Unlikely - Known to occur regionally however based on aerial imagery, the survey area | Unlikely - The survey area lacks suitable wetland habitat, both permanent or temporary water | Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence - Hall's Creek sites C, C3 and Connection Route | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | breeding season it shows a distinct preference for saltmarshes and lagoons near the coast. Movements are not fully understood but it is common and widespread in Australia (Morcombe 2004). | lacks suitable wetland habitat. | bodies. Minor drainage lines are considered unsuitable. | |
| *Glareola maldivarum* | Oriental Pratincole | MI | MI | Non-breeding habitat only: monsoonal rainforest, vine thickets, wet sclerophyll forest or open Casuarina, Acacia or Eucalyptus woodlands. Frequently at edges or ecotones between habitat types. Riparian forest is favoured habitat in the Kimberley region. Typically in denser vegetation with more closed canopy (DCCEEW 2023). | Likely – occurs locally. | Likely – occurs locally and expected to occur aerially over the survey hawking for insects, at least on an occasional or seasonal basis. | PMST, Naturemap, DBCA |
| *Hirundo rustica* | Barn Swallow | MI | MI | In Australia, the Barn Swallow is recorded in open country in coastal lowlands, often near water, towns and cities. Birds are often sighted perched on overhead wires, and also in or over freshwater wetlands, paperbark Melaleuca woodland, mesophyll shrub thickets and tussock grassland (DEE 2019). | Likely – occurs regionally. | Likely - habitat suitable. Likely to be present on at least occasional basis during non-breeding season. | PMST, Naturemap, DBCA |
| *Hydroprogne caspia* | Caspian Tern | MI | MI | The Caspian Tern is mostly found in sheltered coastal embayments (harbours, lagoons, inlets, bays, estuaries and river deltas) and those with sandy or muddy margins are preferred. They also occur on near-coastal or inland terrestrial wetlands that are either fresh or saline, especially lakes (including ephemeral lakes), waterholes, reservoirs, rivers and creeks. They also use artificial wetlands, including reservoirs, sewage ponds and saltworks. In offshore areas the species prefers sheltered situations, particularly near islands, and is rarely seen beyond reefs (DEE 2019b). | Unlikely - Known to occur regionally however based on aerial imagery, the survey area lacks suitable wetland or major drainage habitat. | Unlikely - The survey area lacks suitable wetland habitat, both permanent, temporary water bodies and major drainage. Minor drainage lines are considered unsuitable. | DBCA |
| *Limosa limosa* | Bar-tailed Godwit | MI | MI | Bar-tailed Godwits arrive in Australia each year in August from breeding grounds in the northern hemisphere. Birds are more numerous in northern Australia Bar-tailed Godwits inhabit estuarine mudflats, beaches and mangroves. They are common in coastal areas around Australia. They are social birds and are often seen in large flocks and in the company of other waders (Birdlife Australia 2019). | Unlikely - Known to occur regionally however based on aerial imagery, the survey area lacks suitable wetland habitat. | Unlikely - The survey area lacks suitable wetland habitat, both permanent or temporary water bodies. Minor drainage lines are considered unsuitable. | Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence - Hall's Creek sites C, C3 and Connection Route | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| *Motacilla cinerea* | Grey Wagtail | MI | MI | European and Asian species. Migrates in winter south to Indonesia and New Guinea. Rarely reaches Australia. Occurs usually near fresh streams, but also on mown grass, ploughed land or near sewerage ponds | | | PMST, Naturemap, DBCA |
| *Motacilla flava* | Yellow Wagtail | MI | MI | Occurs in open country near swamps, salt marshes, sewerage ponds, grassed surrounds to airfields, bare ground; occasionally on drier inland plains. Roosts in mangroves and other dense vegetation. Rare but regular visitor around Australia coast, especially the NW coast, Broome to Darwin (Morcombe 2004). | Likely – recorded locally from few records. | Likely – species is likely to occur on at least an occasional seasonal basis | PMST, Naturemap, DBCA |
| *Numenius minutus* | Little Curlew | MI | MI | Little Curlews generally spend the non-breeding season in northern Australia from Port Hedland in WA to the Queensland coast (Minton 2002 pers. comm.). There are records of the species from inland Australia, and widespread but scattered records on the east coast. The Little Curlew is most often found feeding in short, dry grassland and sedgeland, including dry floodplains and blacksoil plains, which have scattered, shallow freshwater pools or areas seasonally inundated. Open woodlands with a grassy or burnt understory, dry saltmarshes, coastal swamps, mudflats or sandflats of estuaries or beaches on sheltered coasts, mown lawns,<br>gardens, recreational areas, ovals, racecourses and verges of roads and airstrips are also used (Higgins & Davies 1996). | Unlikely - Known to occur regionally however based on aerial imagery, the survey area lacks suitable wetland habitat. | Unlikely - The survey area lacks suitable wetland habitat, both permanent or temporary water bodies. Minor drainage lines are considered unsuitable. | Naturemap, DBCA |
| *Pezoporus occidentalis* | Night Parrot | EN | EN | Night Parrots usually inhabit arid or semi-arid grasslands that are dominated by spinifex, though they have also been recorded in shrublands dominated by samphire, bluebush and saltbush (Morcombe 2006). | Unlikely – the survey area lies within the Hart Sub-bioregion, which is low priority for survey (DBCA, 2024) based on low suitability for this species. | Unlikely – the survey area lies within the Hart Sub-bioregion, which is low priority for survey (DBCA, 2024) based on low suitability for this species. | PMST |
| *Plegadis falcinellus* | Glossy Ibis | MI | MI | The Glossy Ibis' preferred habitat for foraging and breeding are fresh water marshes at the edges of lakes and rivers, lagoons, flood-plains, wet meadows, swamps, reservoirs, sewage ponds, rice-fields and cultivated areas under irrigation. The species is occasionally found in coastal locations such as estuaries, deltas, saltmarshes and coastal lagoons. Within Australia, the largest contiguous areas of prime habitat are in inland and northern floodplain areas (Marchant and Higgins 1990). | Unlikely - Known to occur regionally however based on aerial imagery, the survey area lacks suitable wetland habitat. | Unlikely - The survey area lacks suitable wetland habitat, both permanent or temporary water bodies. Minor drainage lines are considered marginal habitat. | Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence - Hall's Creek sites C, C3 and Connection Route | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| *Polytelis alexandrae* | Princess Parrot | VU | P4 | The Princess Parrot is confined to arid regions of Western Australia, the Northern Territory, and South Australia. The Princess Parrot inhabits sand dunes and sand flats in the arid zone of western and central Australia. It occurs in open savannah woodlands and shrublands that usually consist of scattered stands of Eucalyptus (including *E. gongylocarpa, E. chippendalei* and mallee species), *Casuarina* or *Allocasuarina* trees; an understorey of shrubs such as *Acacia* (especially *A. aneura*), *Cassia*, *Eremophila*, *Grevillea*, *Hakea* and *Senna*; and a ground cover dominated by *Triodia* species. It also frequents *Eucalyptus* or *Allocasuarina* trees in riverine or littoral areas (DCCEEW 2023). | Highly unlikely – the survey area sites are beyond northern limit of the species' known range. Occurs in arid bioregions to the south. Any local occurrence would be considered vagrant. | Highly unlikely – the survey area sites are beyond northern limit of the species' known range. Occurs in arid bioregions to the south. Any local occurrence would be considered vagrant. | PMST, Naturemap, DBCA |
| *Rostratula australis* | Australian Painted Snipe | EN | EN | The Australian Painted Snipe is restricted to Australia with historical records from around the Perth region in Western Australia. Prefers fringes of swamps, dams and nearby marshy areas where there is a cover of grasses, lignum, low scrub or open timber nests on the ground amongst tall vegetation, such as grasses, tussocks or reeds. The nest consists of a scrape in the ground, lined with grasses and leaves. Breeding is often in response to local conditions; generally occurs from September to December. Incubation and care of young is all undertaken by the male only. Forages nocturnally on mud-flats and in shallow water. Feeds on worms, molluscs, insects and some plant-matter (DCCEEW 2023). | Unlikely – Based on aerial imagery. The survey area lacks suitable wetland habitat. | Unlikely – no wetland habitat present based on field assessment. Any occurrence would be considered vagrant. | PMST, Naturemap, DBCA |
| *Tringa glareola* | Wood Sandpiper | MI | MI | The Wood Sandpiper uses well-vegetated, shallow, freshwater wetlands, such as swamps, billabongs, lakes, pools and waterholes. Wood Sandpipers are more numerous in the north than the south of Australia and are also found in New Guinea, Africa, the Indian subcontinent and South-east Asia. They breed widely across the north of Europe and Asia, mostly in Scandinavia, Baltic countries and Russia. They are the most abundant migratory wader in non-coastal areas of Asia (DEE 2019b). | Unlikely - Known to occur regionally however based on aerial imagery, the survey area lacks suitable wetland habitat. | Unlikely - The survey area lacks suitable wetland habitat, both permanent or temporary water bodies. Minor drainage lines are considered unsuitable. | Naturemap, DBCA |
| *Tringa nebularia* | Common Greenshank | EN | MI | The Common Greenshank is a heavily built, elegant wader, 30–35 cm in length, with a wingspan of 55–65 cm and weight up to 190 g for both males and females. The bill is long and slightly upturned and the legs are long and yellowish-green. In flight, all plumages show uniformly dark upperwing and constrasting white rump extending in a white wedge up the back, whitish tail and tips of toes projecting slightly beyond the tip of the tail. The sexes are alike (Higgins & Davies 1996). | Unlikely - Known to occur regionally however based on aerial imagery, the survey area lacks suitable wetland habitat. | Unlikely - The survey area lacks suitable wetland habitat, both permanent or temporary water bodies. Minor drainage lines are | Naturemap, DBCA |

| Taxon | Common Name | Status | | Description and Habitat Requirements | Likelihood of occurrence - Hall's Creek sites C, C3 and Connection Route | | Source |
|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | The species is seen singly or in small to large flocks (sometimes hundreds) in a variety of coastal and inland wetlands. The Common Greenshank does not breed in Australia, however, the species occurs in all types of wetlands and has the widest distribution of any shorebird in Australia (Higgins & Davies 1996). It occurs around most of the coast from Cape Arid in the south to Carnarvon in the north-west. In the Kimberleys it is recorded in the south-west and the north-east, with isolated records from the Bonaparte Archipelago (Higgins & Davies 1996). | | considered unsuitable. | |
| *Tringa stagnatilis* | Marsh Sandpiper | MI | MI | The Marsh Sandpiper lives in permanent or ephemeral wetlands of varying salinity, including swamps, lagoons, billabongs, saltpans, saltmarshes, estuaries, pools on inundated floodplains, and intertidal mudflats and also regularly at sewage farms and saltworks. They are recorded less often at reservoirs, waterholes, soaks,<br>bore-drain swamps and flooded inland lakes. In north Australia they prefer intertidal mudflats (Higgins & Davies 1996), although surveys in Kakadu National Park recorded more birds around shallow freshwater lakes than in areas influenced by tide. At the Top End they often use ephemeral pools on inundated freshwater and tidal floodplains (Higgins & Davies 1996). They are found infrequently around mangroves (Higgins & Davies 1996). | Unlikely - Known to occur regionally however based on aerial imagery, the survey area lacks suitable wetland habitat. | Unlikely - The survey area lacks suitable wetland habitat, both permanent or temporary water bodies. Minor drainage lines are considered unsuitable. | Naturemap, DBCA |
| **FISH** | | | | | | | |
| *Hannia greenwayi* | Greenway's grunter | - | P1 | A small slender golden to silvery-grey grunter species with large dark-edged scales and a lower part of the caudal fin. Juveniles have a dark spot at the soft dorsal and anal-fin bases. Large adults may have thick blubbery lips, and captured individuals may appear to have broad vertical bars.<br>The species measures up to 14cm in length and is typically found in freshwater streams of the North Kimberley (Gomon & Bray, 2021). | Highly unlikely – the survey area lies well beyond the eastern edge of species' known range. | Highly unlikely – the survey area lies well beyond the eastern edge of species' known range. | DBCA |
| *Pristis pristis* | Freshwater Sawfish | VU | P3 | The Freshwater Sawfish is a ray growing to 7 m, having five pairs of gill-openings on the ventral surface of the head; a distinguishing feature of rays. It has less than 20 teeth on each side of its saw (Allen 1989a; Phillips et al. 2008).<br>The Freshwater Sawfish may potentially occur in all large rivers of northern Australia from the Fitzroy River, Western Australia, to the western side of Cape York Peninsula, Queensland. It is mainly confined to the main channels of large rivers (Allen 2000, pers. comm.). | Highly unlikely – the survey area lies well beyond the species' known range. | Highly unlikely – the survey area lies well beyond the species' known range, and lack or suitable riverine habitat. | PMST, Naturemap, DBCA |

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|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | The species is known from several drainages of northern Australia including the Fitzroy River, Durack River and Ord River in Western Australia; the Adelaide River, Victoria River and Daly River of the Northern Territory; and the Gilbert River, Mitchell River, Norman River and Leichhardt River of Queensland (Last & Stevens 1994). The species is also recorded from the McArthur River, Northern Territory (Merrick & Schmida 1984). In the Fitzroy River catchment it is probably confined to the main Fitzroy River; in the Durack River catchment it probably only occurs in the main Durack River; in the Ord River catchment it occurs only in the Main Ord Channel below Kununurra Dam and in the Pentecost River; and in the Victoria River catchment it is probably restricted to the main Victoria River and possibly Fitzmaurice River (Allen 2000, pers. comm.). | | | |
| **MAMMAL** | | | | | | | |
| *Lagorchestes conspicillatus leichardti* | Spectacled hare-wallaby (mainland) | - | P4 | The Spectacled Hare-wallaby (Barrow Island), is a small wallaby with a conspicuous orange ring around its eyes. Its back and sides are covered with brown fur with white tips, and its underside is white. The tail fur is grey-brown with dark tips, and the feet are pale grey-brown. The specific subspecies, *L. conspicillatus leichardti,* occurs on the mainland, where it is considered rare and scattered in Western Australia, but more common in the Northern Territory and Queensland (Ingleby, 1991), where it inhabits open forests, woodlands, shrublands, and hummock grasslands, preferring areas where there is a mosaic of vegetation due to differences in fire history (Ingleby, 1991). | Unlikely - Historical records exist in the regional area but little would be known about the current population. | Unlikely - Habitat within survey area lacks low dense vegetation structure, and marginal at best. | DBCA |
| *Leggadina lakedownensis* | Lakeland Downs Mouse | - | P4 | The Lakeland Down's short-tailed mouse is a small native rodent with pelage that is light grey-brown, grading to pure white on the belly. The snout is blunt, ears short and often surrounded by dorsal hairs. The species occurs across northern Australia, from Cape York to the Pilbara (Western Australia), with one population on Thevenard Island (Western Australia). A population has been established on Serrurier Island (Western Australia) by translocation of Thevenard Island individuals. The species is known to occur on sandy soils and cracking clays in Western Australia, and tropical tussock grasslands or woodlands in Queensland. On Thevenard Island, it occupies Acacia shrublands and low shrubs on deep sandy soils. | Likely – based on distribution and predicted habitat within survey area. | Likely - habitat appears suitable: sandplain with tussock and hummock grasses and sparse shrubland. | DBCA |
| *Macroderma gigas* | Ghost Bat | VU | VU | The Ghost Bat occurs in a wide range of habitats, and requires an undisturbed cave, deep fissure or disused mine shaft in which to roost. It is patchily distributed across Australia, and is sensitive to disturbance (Van Dyck and Strahan 2008). | Likely – Historical records in the region | Likely – no suitable roost habitat within survey area, however | PMST, ALA |

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| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| | | | | | | extensive potential roost habitat (rocky breakaway) in region. Likely to occur (foraging) on at least occasional basis. | |
| *Macrotis lagotis* | Greater Bilby | VU | VU | The Greater Bilby usually spends the daytime in burrows, often built against termite mounds, spinifex hummock or shrubs (Van Dyck and Strahan 2008). The Greater Bilby occupies three major vegetation types; open tussock grassland on uplands and hills, mulga woodland/shrubland growing on ridges and rises, and hummock grassland in plains and alluvial areas. In the south of its range, the Greater Bilby lives on rises and ridges among sparse grasses, especially mitchell grass Astrebla and short shrubs. In Western Australia there are disjunct populations in the Gibson Desert, south-western Kimberley, inland areas of the Pilbara and northern Great Sandy Desert. The current occurrence of this species is strongly associated with higher rainfall and temperatures, which promote areas of higher plant and food production (DCCEEW 2023). | Unlikely -only historical records in the area. | Unlikely – due to range reduction in WA, and suitable arid habitat outside of WA across to NT. | PMST, Naturemap, DBCA |
| *Trichosurus vulpecula arnhemensis* | Northern Brush-tailed Possum | VU | VU | A nocturnal and arboreal species that inhabits forests and tall woodlands of the monsoon tropics of the Kimberley and Top End typically in areas with adequate dense canopy density allowing the possum some arboreal habitat connectivity via canopy tree foliage. It feeds primarily on foliage, blossom and fruits, but will also forage on ground for invertebrates (Menkhorst and Knight 2004). Shelters in tree hollow. This species adapts well to rural and urban habitats (Ganslosser et.al 1991) although appears to be in general decline (Woinarski 2004). | Unlikely – old historical records in the region | Unlikely – the survey area lacks suitable vegetation canopy structure. | PMST, Naturemap, DBCA |
| *Vespadelus douglasorum* | Yellow-lipped bat | - | P2 | Small microbat species, confined to the Western Kimberley mostly in relatively high rainfall areas (> 800mm). Forages in woodlands, particularly riparian vegetation in proximity to rocky habitat where in will roost in caves and crevices. | Likely – suitable habitat and records nearby. | Known – recorded on device, as Probable record. | Naturemap, DBCA |
| **REPTILES** | | | | | | | |

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|---|---|---|---|---|---|---|---|
| | | EPBC Act | BC Act /DBCA | | Pre-field assessment | Post-field assessment | |
| *Crocodylus johnstoni* | Freshwater Crocodile | - | OS | Freshwater crocodiles are widespread across northern Australia and occur in permanent freshwater rivers, gorges and billabongs (Wilson and Swan, 2017). The species can persist in small seasonal creeks that have pools present year round. Typically the species is abundant where habitat is available however has been severely impacted by the invasion of Cane Toads into the Kimberley. | Likely – suitable habitat and records present | Likely – Suitable habitat, drainage line in the survey area. | Naturemap, DBCA |
| *Cryptagama aurita* | Gravel dragon | - | P1 | This is a small, stout agamid dragon species with a total snout to vent length of less than 5cm and a fully exposed tympanum with the tail noticeably shorter than the body (Wilson & Swan, 2013). It is found within the North-Eastern Interior of Western Australia with a notable habitat preference for stony soils and spinifex vegetation. | Likely - Historical records present in the region. | Likely – suitable habitat is in the survey area. | DBCA |
| *Liophoris kintorei* | Great Desert Skink | VU | VU | The Great Desert Skink is a large burrowing lizard that can grow up to 44 cm long and weigh up to 350 g. The species has reddish-tan smooth scales, with creamy-lemony flanks and a yellow belly.<br>The current distribution of the Great Desert Skink consists of seven isolated populations and exceeds 5000 individuals (McAlpin 2001).<br>Three populations occur in WA at Patjarr (population estimated to be less than 2500 individuals), near the Kiwirrkura community, including the vicinity of Lake Mackay (less than 500 individuals), and in Rudal River National Park (unknown population size).<br>The Great Desert Skink generally occurs on red sandplains and sand ridges (Cogger et al. 1993). Regenerating vegetation appears to be a critical habitat requirement (McAlpin 1997). Skinks appear to prefer a mosaic landscape of different aged vegetation and inhabit sites that have been burnt in the previous three to fifteen years (McAlpin 1998, 2001). Preferred habitat has at least 50% bare ground (McAlpin 1998). | Unlikely – not known from area and habitat not suitable, prefers arid sandplains. | Unlikely – not known from area and habitat not suitable, prefers arid sandplains. | PMST |
| *Tiliqua scincoides intermedia* | Northern Blue-tongue Skink | CR | - | Northern Blue-tongue Lizards move widely across the savannah landscape but spend most of their time in small fragmented patches of habitat that offer cooler moister conditions. Individuals spend long periods within small and distinctive habitat patches, interspersed with longer directional relocations from one patch to the next. The patches provide relatively shaded, cool, and damp conditions, with higher grass and more leaf-litter cover. The location of these patches in the landscape is probably determined by drainage patterns, soil moisture-holding ability, and stochastic recruitment of shade trees (Shine 2017; Price-Rees et al., 2013). | Likely – there are records from the area | Likely – there is suitable habitat for the species, it may occur in lower numbers as it is on the outer end of its range. | PMST<br>ALA |
| *Varanus mertensi* | Merten's Water Monitor | EN | - | Mertens' Water Monitor is a semi-aquatic lizard usually found basking on rocks, logs, trees and branches overhanging rivers, swamps and lagoons. It inhabits watercourses, billabongs, springs | Likely – there have been | Likely – there is suitable habitat for this species | PMST<br>ALA |

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| | | | | and soaks within its geographical distribution. The species also inhabits human-made water bodies such as dams and irrigation channels (Mayes et al., 2005). | records in the region in the past | (drainage line) but may occur in low numbers or occasional basis as it is on the outer extent of species range. | |
| *Varanus mitchelli* | Mitchell's Water Monitor | CR | - | Mitchell's Water Monitor is found in aquatic habitats throughout the northern parts of Western Australia and the Northern Territory (Cogger 2014). Its range may extend into far north-west Queensland (Macdonald 2016). It is not known to occur on any offshore islands: surveys of more than 66 islands across the Kimberley region and the Wessel, English and Tiwi island groups in the Northern Territory did not record the presence of Mitchell's Water Monitor (Woinarski et al. 1999, 2003; Palmer et al. 2013). | Likely – there have been records in the region in the past | Likely – there is suitable habitat for this species (drainage line) but may occur in low numbers or occasional basis as it is on the outer extent of species range. | PMST<br>ALA |




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