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) 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) DBCA – Lands of Interest (DBCA-012)
Hydrology	Public Drinking Water Source Areas (DWER-033) RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037) RIWI Act, Groundwater Areas (DWER-034) RIWI Act, Rivers (DWER-036) Waterways Conservation Act Management Areas (DWER-072) Ramsar Sites (DBCA-010) Directory of Important Wetlands in Australia - Western Australia (DBCA-045)
Vegetation	Pre-European Vegetation (DPIRD-006) Native Vegetation Extent (DPIRD-005) (GoWA 2024) 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) 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) DBCA *NatureMap* database (DBCA 2007-) DBCA Threatened fauna database (DBCA 2024b)
Flora Diversity and Significant Flora	DBCA *NatureMap* database (DBCA 2007–) DCCEEW PMST database to identify fauna species listed under the EPBC Act potentially occurring within the study area (DCCEEW 2024) 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 Pali Jayasekara	FB62000664 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 Alex Sleep	FB62000080-3 FB62000557

Location	Survey type	Date	Personnel	Licence/permit number
		6 to 12 March 2024	Angela Benkovic Alex Sleep Luann Nilsson	FB62000080-3 FB62000557 FB62000665
	Targeted fauna survey	12 to 18 February 2024	Erin Lynch Glen Gaikhorst	
		6 to 12 March 2024	Erin Lynch Glen Gaikhorst Sarah Flemington	
Halls Creek	Detailed Flora and vegetation and Targeted Flora	22 to 26 April	Joel Collins Rachael Graham	FB62000664 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: – *Chaerephon jobensis* and *Saccolaimus flaviventris* – *Taphozous georianus* and *Taphozous hilli* – *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: Broadscale (1:1,000,000) mapping by Beard (1976) and digitised by Shepherd et al. (2002) 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. 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) Nil (Camballin/Looma, Derby and Halls Creek)	**Camballin/Looma, Derby and Halls Creek** 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. **Broome** 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. 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) 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. **Camballin/Looma** 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. **Broome** 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. **Derby** 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. **Halls Creek** 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: **Derby** – Flora and vegetation: 14 field days – Fauna: 7 field days **Camballin/Looma** – Flora and vegetation: one field day – Fauna: one field day **Broome** – Flora and vegetation: 28 field days – Fauna: 35 field days **Halls Creek** – Flora and vegetation: 10 field days – 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: Technical Director Zoology/Principal Zoologist Glen Gaikhorst has over 25 years of experience undertaking fauna surveys with extensive experience undertaking fauna surveys in Broome. 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. Technical Director Botany/Ecology/Ecology Team Lead Senior Ecologist Erin Lynch has over 15 years of experience with fauna and ecology surveys with extensive experience undertaking fauna surveys in Broome. 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. Senior Ecologist Sarah Flemington has approximately 7 years of experience conducting targeted fauna and ecology surveys, including several surveys in the Broome region 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.

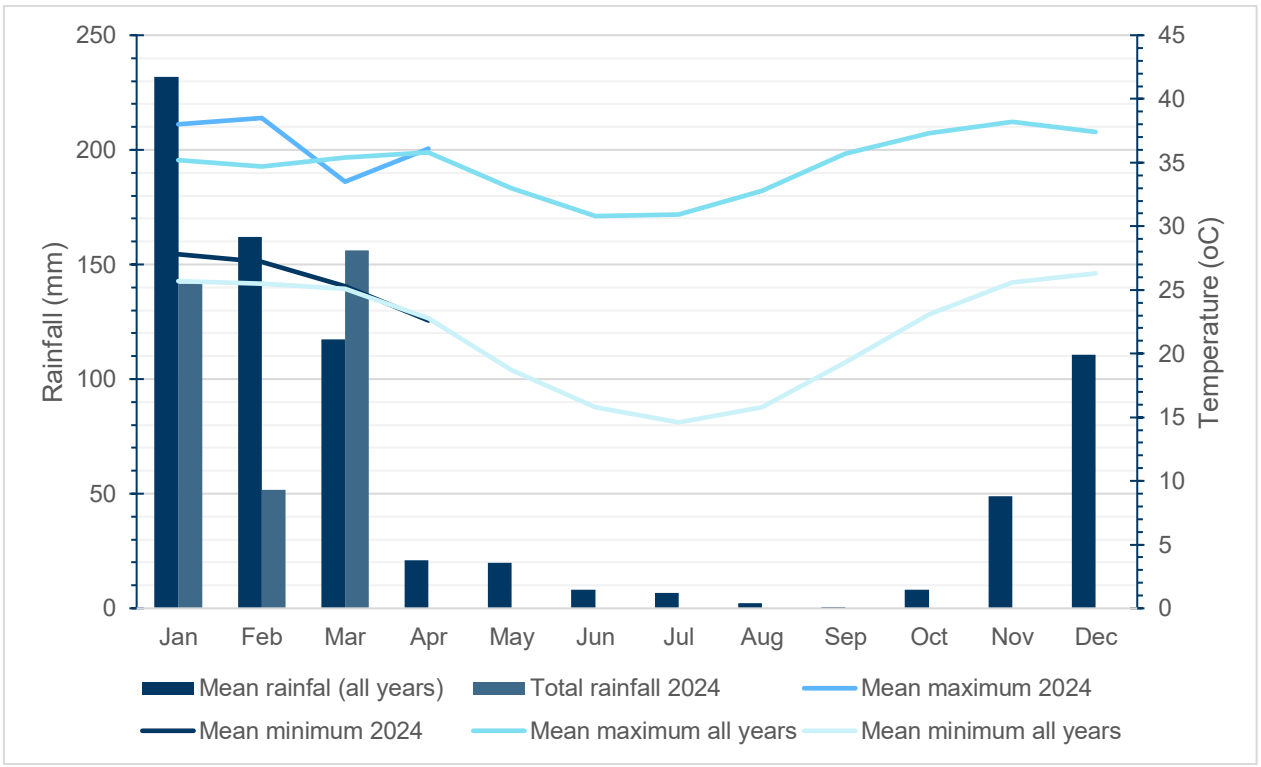


Plate 2 ***Climate data (BoM, 2024) for Camballin***

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.

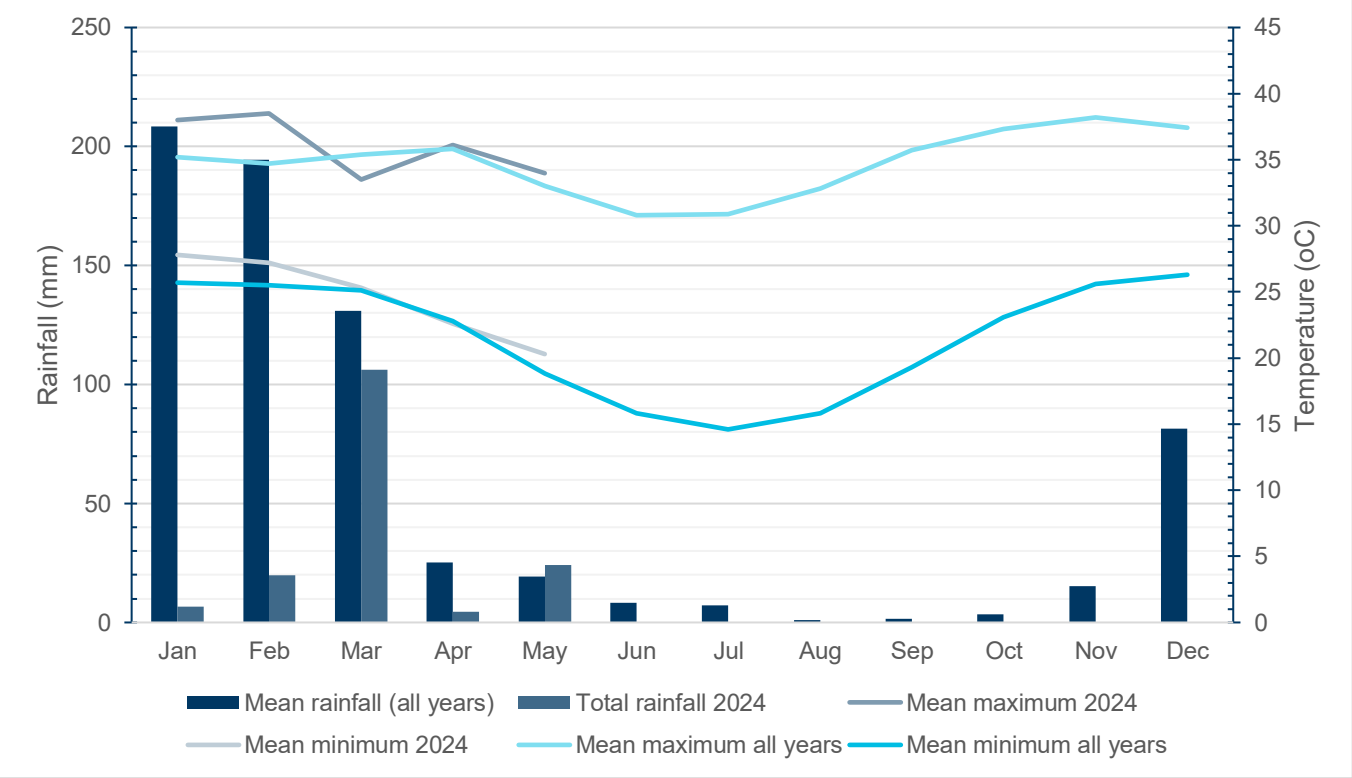


Plate 3 ***Climate data (BoM, 2024) – Derby***

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. 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).

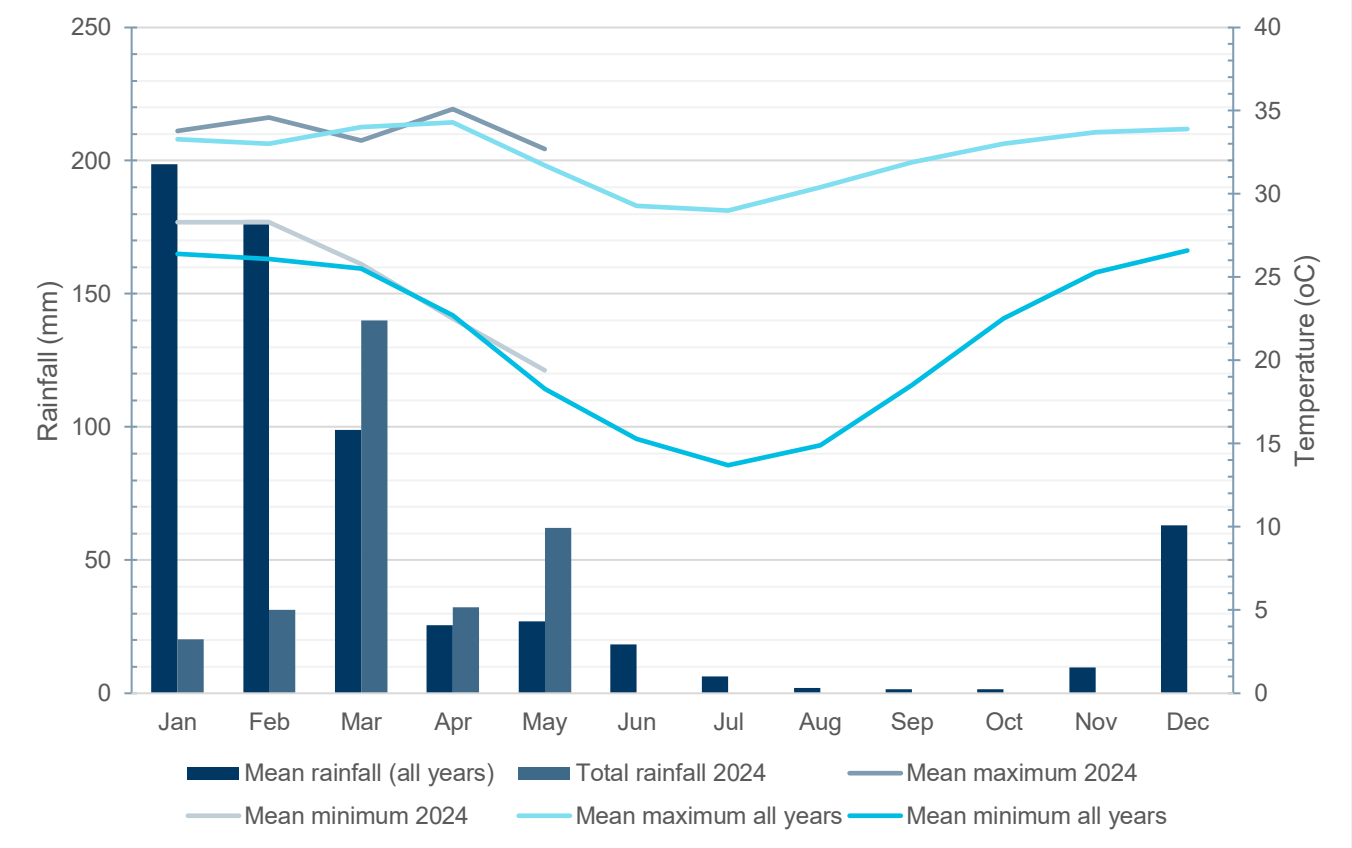


Plate 4 ***Climate data (BoM, 2024) – Broome***

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. 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 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. 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. 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. 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. 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. 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.

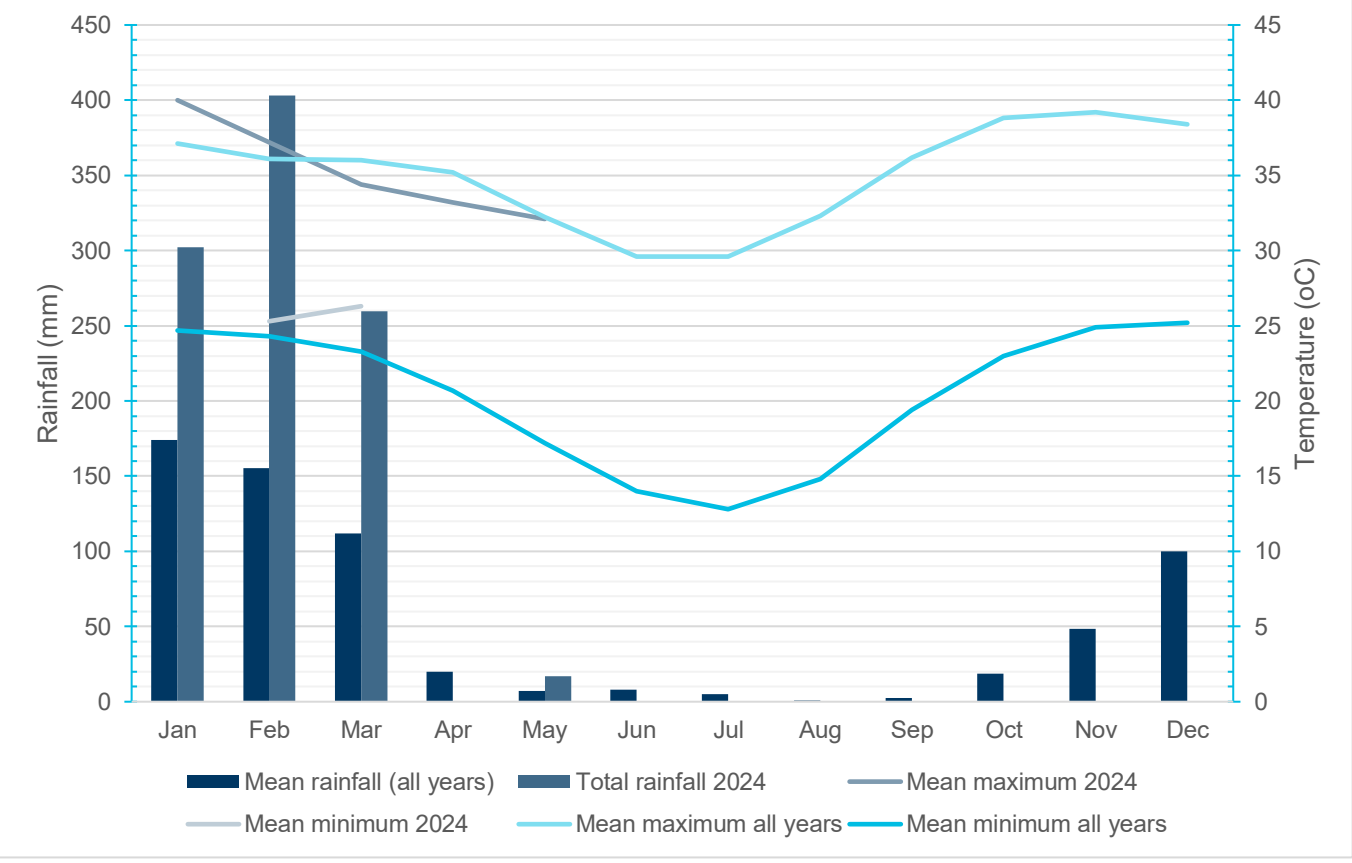


Plate 5 ***Climate data (BoM, 2024) – Halls Creek***

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** 4.09 ha (80.51%) Site C: 3.53 ha 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** 232.88 ha (35.52%) Site P (230.51 ha) 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** 172.31 ha (26.28%) Site C (94.83 ha) Site D (72.42 ha) 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** 190.86 ha (29.11%) Site I (25.11 ha) Site C (31.76 ha) Site D (99.18 ha) Site O (28.55 ha) 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 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** 908.73 ha (91.90%) Site F (454.85 ha) Site F Connection (16.75 ha) Site G (222.82 ha) Site G-H Connection (20.35 ha) 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). 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** 44.35 ha (4.48%) 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 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** 0.63 ha (0.06%) Site F Connection (0.63 ha)	BRR11	
VT08	Tidal mudflats 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** 0.91 ha (0.09%) 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** 15.53 ha (7.99%) 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** 45.82 ha (23.58%) Site C (18.47 ha) Subsite C3 (22.76 ha) 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. 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** 129.1 ha (66.43%) Site C (23.37 ha) Subsite C3 (87.21 ha) 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** 0.57 ha (0.29%) 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** 1.15 ha (0.18%) Site O (0.50 ha) Connections route (0.66 ha) **Broome** 1.91 ha (0.19%) Site F Connection (1.91 ha)		
Planted native trees over weeds	Planted native *Corymbia/Eucalyptus* trees over weeds on maintained road verge	**Derby** 2.86 ha (0.44%) 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** 1.96 ha (0.20%) 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** 21.69 ha (2.19%) Site F (2.56 ha) Site F Connection (16.43 ha) 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** 0.71 ha (0.07%) Site F (0.65 ha) Site F Connection (0.07 ha)	No site	
Cleared	Areas devoid of native vegetation, such as tracks and historically cleared areas.	**Camballin** 0.99 ha (19.48%) Site C (0.75 ha) Connection route (0.24 ha) **Halls Creek** 3.33 ha (1.71%) Site C (0.09 ha) Subsite C3 (0.61 ha) Connections route (2.63 ha) **Derby** 55.64 ha (8.49%) Site I (1.56 ha) Site C (3.37 ha) Site D (8.41 ha) Site O (9.14 ha) Site P (5.4 ha) Connections route (27.76 ha) **Broome**		

Vegetation type	Vegetation Type Description	Extent (ha) and proportion of individual survey area (%)	Sampling sites	Photograph
		7.97 ha (0.81%) Site F (3.66 ha) Site F Connection (3.42 ha) 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. **Significant fauna** 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. Fork-tailed Swift (MI) was recorded in area O, as is likely to occur at least on a seasonal basis across all habitats. Oriental Cuckoo (MI) was recorded in area D and is likely to occur over all habitats. The Northern Coastal Free-tailed Bat (P1) was recorded at Derby. It is likely to roost in tree hollows in all habitats. The Gouldian Finch (EN/P4) is likely to occur at Derby due to the presence of suitable foraging habitat (seasonal grasses). 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. 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. The Barn Swallow (MI) is likely to occur in Derby at least on an occasional basis and during the non-breeding season. 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%) Site C (31.76 ha) Site D (99.18 ha) Site O (28.55 ha) Site I (25.11 ha) 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. **Habitat value** 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. **Significant fauna** The Northern Coastal Free-tailed Bat (P1) was recorded at Derby. It is likely to roost in suitable tree hollows in all habitats. Fork-tailed Swift (MI) was recorded in area O, as is likely to occur at least on a seasonal basis across all habitats. Oriental Cuckoo (MI) was recorded in area D and is likely to occur over the entirety of habitats. The Northern Blue-tongue Skink (CR) was recorded at Sites P, C and O and is highly likely to occur across all habitats. 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. **Habitat value** High	172.31 ha (26.28%) Site C (94.83 ha) Site D (72.42 ha) 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. **Significant fauna** The Northern Coastal Free-tailed Bat (P1) was recorded at Derby. It is likely to roost in suitable tree hollows in all habitats. Fork-tailed Swift (MI) was recorded in area O, as is likely to occur at least on a seasonal basis across all habitats. Oriental Cuckoo (MI) was recorded in area D and is likely to occur over all habitats. The Northern Blue-tongue Skink (CR) was recorded at Sites P, C and O and is highly likely to occur across all habitats. The Gouldian Finch (EN/P4) is likely to occur at Derby due to the presence of suitable foraging habitat (seasonal grasses). 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. 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. The Barn Swallow (MI) is likely to occur in Derby at least on an occasional basis and during the non-breeding season. 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. **Habitat value** High	232.88 ha (35.52%) Site P (230.51 ha) 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** Nil **Habitat value** Low	4.01 ha (0.61%) Site O (0.50 ha) Connections route (3.51 ha)	
5 – Cleared areas	**Significant fauna** **Habitat value** Nil	55.64 ha (8.49%) Site C (3.37 ha) Site D (8. ha) Site O (28.55 ha) Site I (1.56 ha) 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. **Significant fauna** The Fork-tailed Swift (MI) is likely to occur across the site during the seasonal non-breeding period. The species forages aerially over habitat. 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. 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. Bilby (VU) is likely to occur as the habitat is assessed as suitable for foraging and could occur 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.	4.09 ha (80.51%) Site C: 3.53 ha Connection route: 0.56 ha	

Habitat Type	Description	Extent (ha) and proportion of survey area (%)	Representative Images
	Habitat value High		
2 - Cleared areas	**Significant fauna** Nil **Habitat value** Nil	0.99 ha (19.48%) Site C (0.75 ha) 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. **Significant fauna** 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. Grey Falcon (VU) occurs locally, and suitable foraging habitat is present. Likely to occur on at least an occasional basis. There is suitable foraging habitat for the Peregrine Falcon (OS) and is likely to occur at least on an occasional basis. 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. The Yellow Wagtail (MI) is likely to occur on at least an occasional basis. 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%) Site C (22.08 ha) Subsite C3 (84.59 ha) 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. The Yellow-lipped cave bat (P2) was recorded during the survey (Probable record). Would be expected to forage in the survey area. 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. **Habitat value** 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. **Significant fauna** 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. The Oriental Pratincole (MI) occurs locally, and is likely to be present on at least a seasonal basis, aerially hawking for insects. 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. **Habitat value** High	15.19 ha (7.78%) 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. 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. This drainage line was recorded with flowing water at the time of the survey, making it an important water source for many fauna species. **Significant fauna** 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. The Oriental Pratincole (MI) occurs locally, and is likely to be present on at least a seasonal basis, aerially hawking for insects. 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. Habitat appears suitable for the Northern Short-tailed mouse (P4); sandplain with tussock and hummock grasses and sparse shrubland, on clayey flats. The Yellow-lipped cave bat (P2) was recorded during the survey (Probable record). Would be expected to forage in the survey area. 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 %) Site C (1.86 ha) 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. 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. 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. **Habitat value** 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. **Significant fauna** The Gravel Dragon (P1) is likely to occur as the survey area provides suitable stony habitat. 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. 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. **Habitat value** High	46.48 ha (23.82 %) Site C (18.47 ha) Subsite C3 (23.42 ha) Connection route (4.59 ha)	
5 – Cleared areas	**Significant fauna** Nil **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) Subsite C3 (0.61 ha) 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. **Significant fauna** 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. The Fork-tailed Swift (MI) was recorded in large numbers (150) in this habitat type, flying overhead and foraging aerially. The Grey Falcon (VU) is likely to occur as there are records of species present 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. Osprey (MI) has previously been recorded in the nearby area occupying a nest and is therefore likely to occur. Bare-rumped Sheathtail Bat (VU) was recorded with a Definite call reading. Bilby (VU) was recorded active in the survey area.	908.73 ha (91.90%) Site F (454.85 ha) Site F Connection (16.75 ha) Site G (222.82 ha) Site G-H Connection (20.35 ha) 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. Habitat appears suitable; sandplain with tussock and hummock grasses and sparse shrubland for the Northern Short-tailed mouse (P4). Suitable habitat is present for the Dampierland Plain Slider (P2) within survey areas, namely low elevation ancient dunes supporting shrubland. Suitable habitat is present for the Dampierland Burrowing Snake (P2) within survey areas, namely low elevation ancient dunes supporting shrubland. Northern Blue-tongue Skink (CR) recorded within all Sites (F,G,H) during the survey. **Habitat value** 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.* **Significant fauna** 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. The Fork-tailed Swift (MI) was recorded in large numbers (150) in this habitat type, flying overhead and foraging aerially. Bilby (VU) was recorded active in the survey area. Northern Brush-tail Possum (VU) was recorded on camera and suitable habitat. The Grey Falcon (VU) is likely to occur as there are records of species present in the region. The Peregrine Falcon (OS) is known to occur locally, and the pindan shrubland habitat within the study area	44.35 ha (4.48%) 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. Osprey (MI) has previously been recorded in the nearby area occupying a nest and is therefore likely to occur. Bare-rumped Sheathtail Bat (VU) was recorded with a Definite call reading. Habitat appears suitable; sandplain with tussock and hummock grasses and sparse shrubland for the Northern Short-tailed mouse (P4). Suitable habitat is present for the Dampierland Plain Slider (P2) within survey areas, namely low elevation ancient dunes supporting shrubland. Suitable habitat is present for the Dampierland Burrowing Snake (P2) within survey areas, namely low elevation ancient dunes supporting shrubland. Northern Blue-tongue Skink (CR) recorded within all Sites (F,G,H) during the survey. **Habitat value** 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. **Significant fauna** 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. Osprey (MI) has previously been recorded in the nearby area occupying a nest and is therefore likely to occur.	0.63 ha (0.06%) 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. Suitable habitat is present for the Dampierland Burrowing Snake (P2) within survey areas, namely low elevation ancient dunes supporting shrubland. 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. **Habitat value** Medium		
4 – Sparse mangrove tidal mudflat	Tidal mudflats 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 **Significant fauna** Grey Falcon (VU) Peregrine Falcon (OS) Osprey (MI) **Habitat value** Low. This habitat area is very small in the survey area, and disturbed.	0.91 ha (0.09%) 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 **Significant fauna** 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). **Habitat value** Low	4.59 ha (3.28%) Site F Connection (3.94 ha) 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 **Significant fauna** Nil **Habitat value** Nil	7.97 ha (0.81%) Site F (3.66 ha), Site F Connection (3.42 ha) 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).



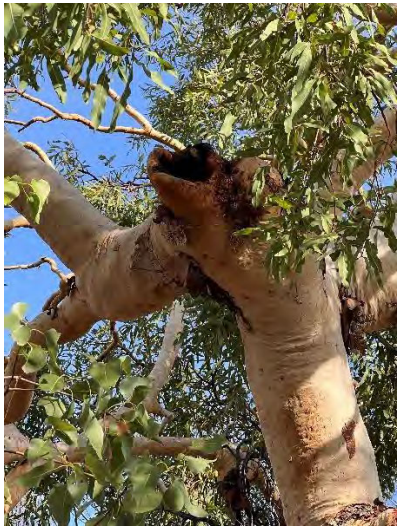
Plate 20 *Northern Brushtail Possum captured on remote camera - Broome*

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. **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. **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. **Camballin**: Likely - habitat assessed as suitable for foraging and likely to occur on at least occasional basis. **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. **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. **Camballin**: Likely - habitat assessed as suitable for foraging and likely to occur on at least occasional basis. **Halls Creek**: Likely – occurs locally, and suitable foraging habitat present. Likely to occur on at least occasional; basis. **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. **Camballin**: Likely - habitat assessed as suitable for foraging and likely to occur on at least occasional basis. **Halls Creek**: Likely – suitable foraging habitat occurs within the survey area sites. Likely to occur at least on occasional basis. **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. **Camballin**: Likely - habitat assessed as suitable for foraging and likely to occur on at least occasional basis. **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. **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. **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. **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. **Broome**: Likely - habitat appears suitable: sandplain with tussock and hummock grasses and sparse shrubland. **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. **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. **Camballin**: Likely –suitable habitat. **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.

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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*

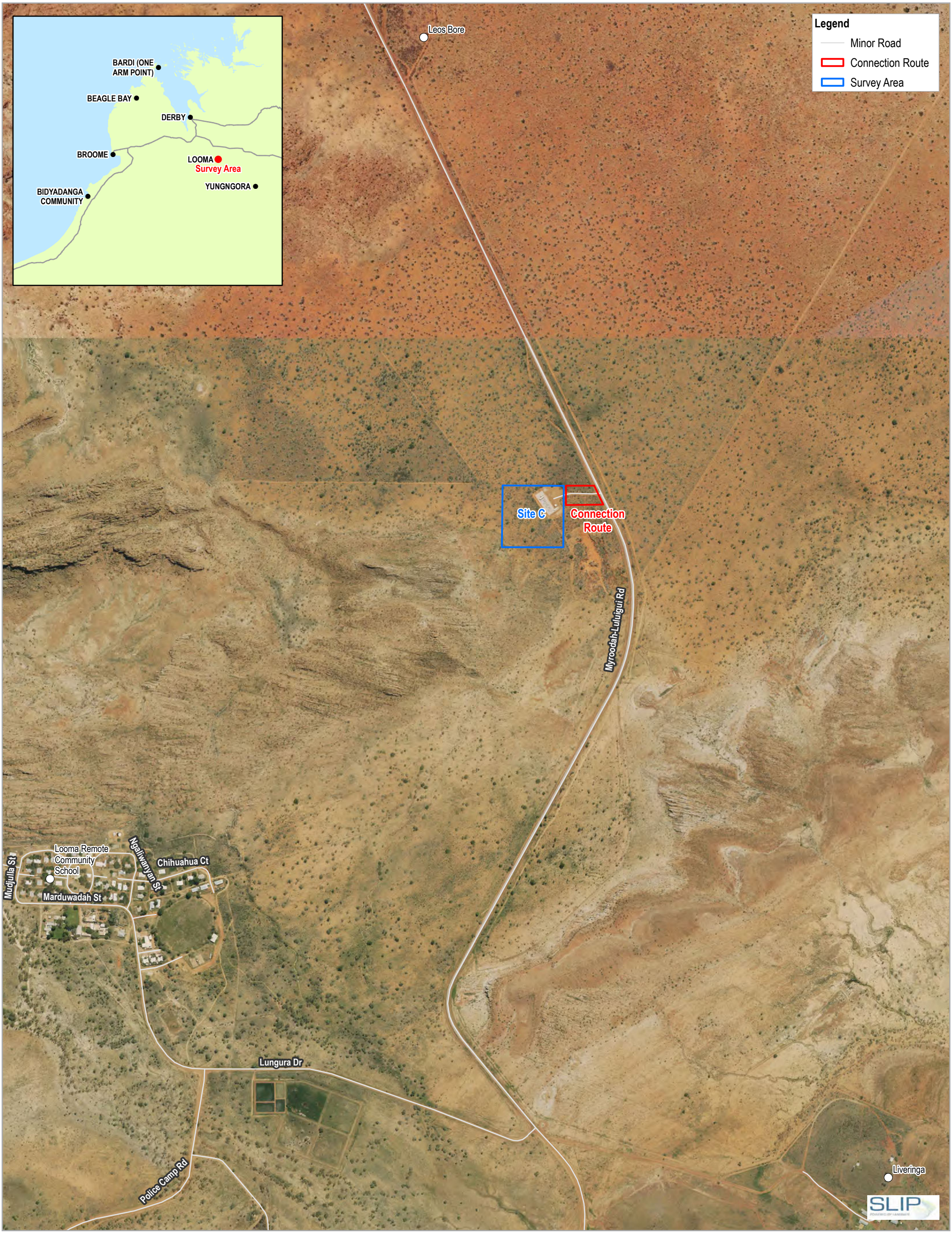
Figure 21 *Survey effort – Halls Creek*

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
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

Location - Camballin/Looma

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

FIGURE 1

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Print date: 10 Jul 2024 - 13:39

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

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
Fitzroy River
Myroodah-Luluigui Rd
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

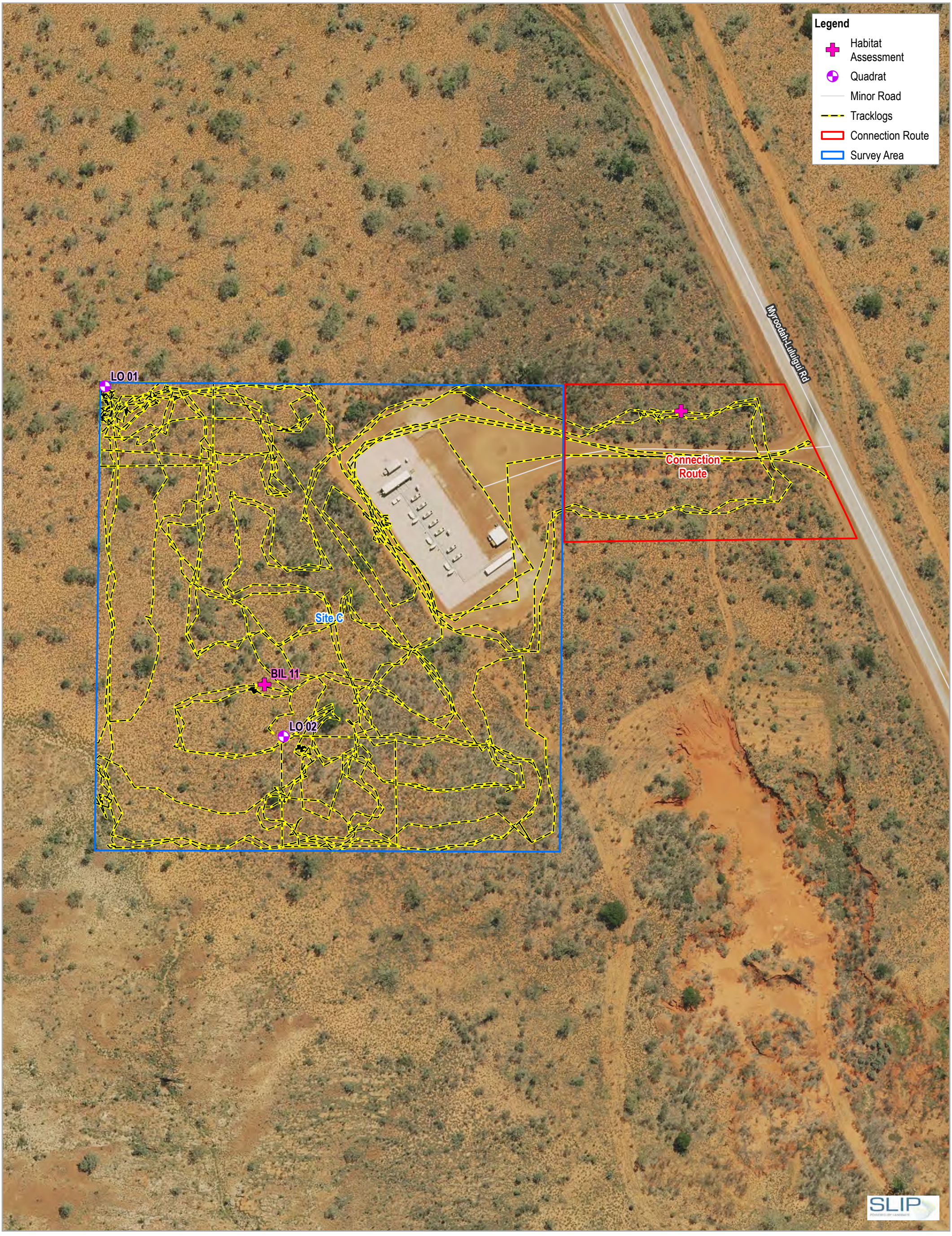
Environmental Constraints - Camballin/Looma

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

FIGURE 2

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_002_EnvironmentalConstraints_Camballin_Rev0
Print date: 10 Jul 2024 - 13:36

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



Paper Size ISO A3
at Scale: 1:1,500

0 15 30 45 60
Meters

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

N

GHD

Horizon Power
Kimberley Biological Survey

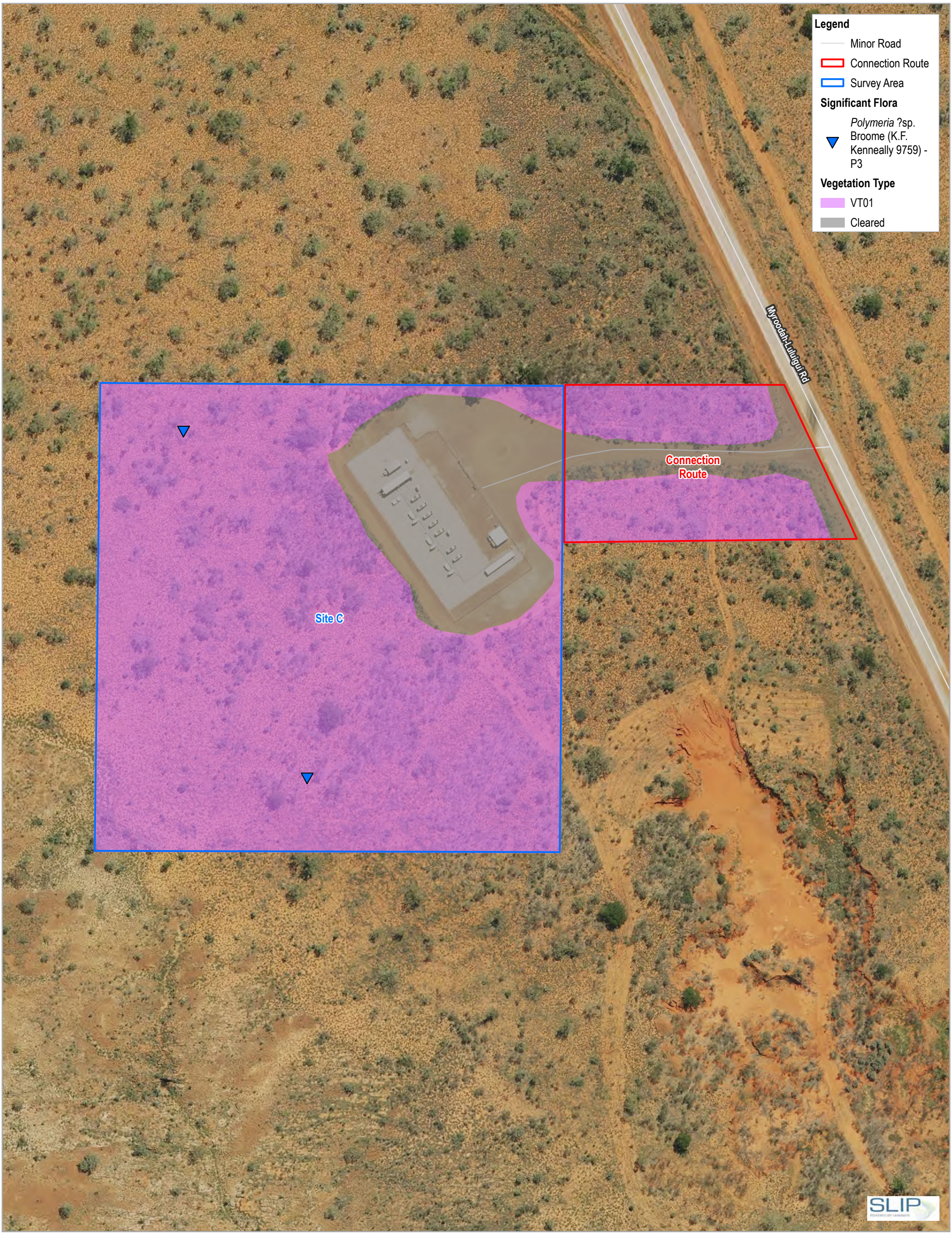
Survey Effort - Camballin/Looma

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

FIGURE 3

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_003_SurveyEffort_Camballin_Rev0
Print date: 10 Jul 2024 - 13:38

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



Paper Size ISO A3
at Scale: 1:1,500

0 15 30 45 60

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 - 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
Print date: 10 Jul 2024 - 13:44

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



Paper Size ISO A3
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0 15 30 45 60

Meters

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

N

GHD

Horizon Power
Kimberley Biological Survey

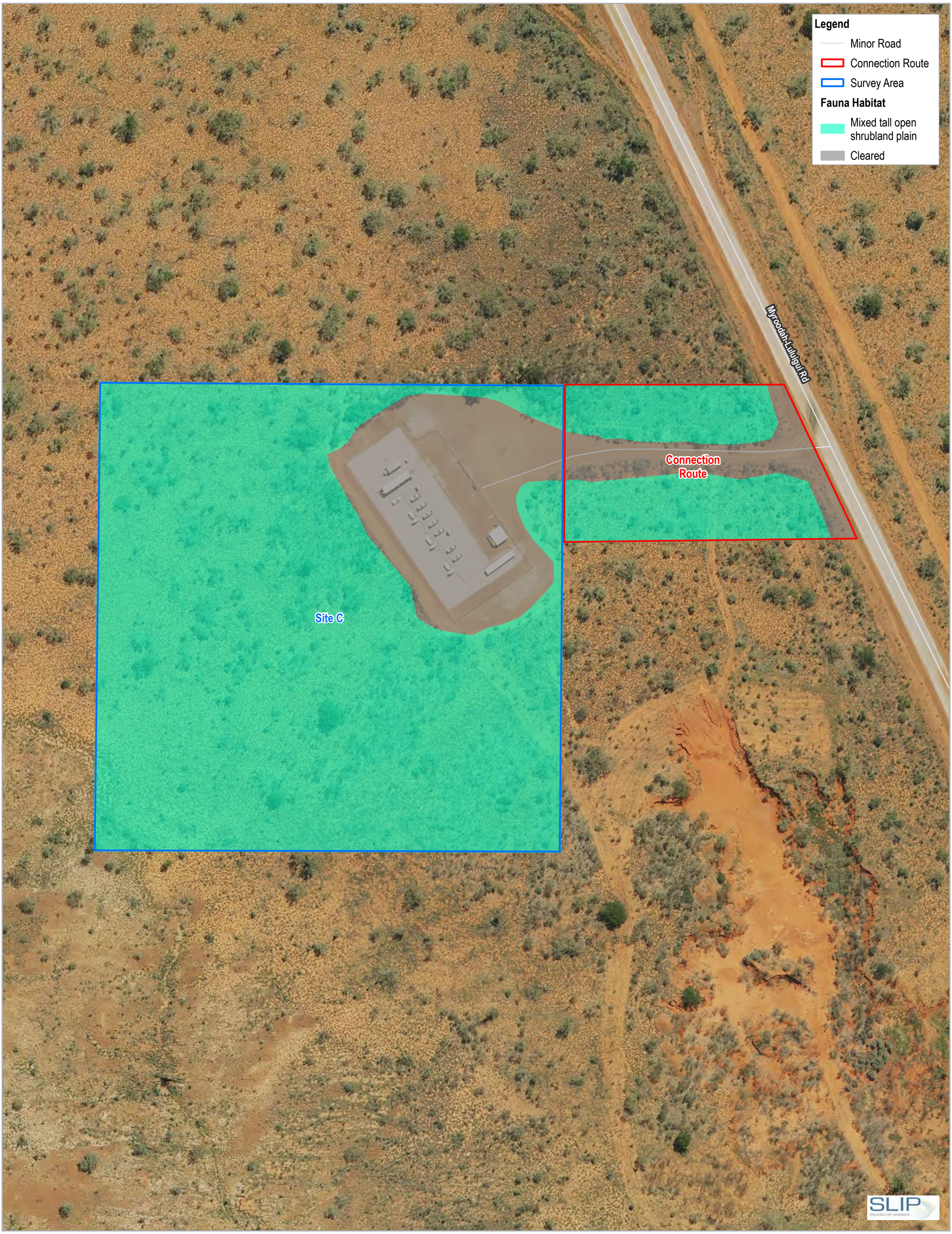
Vegetation Condition - Camballin/Looma

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

FIGURE 5

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_005_VegCondition_Camballin_Rev0
Print date: 10 Jul 2024 - 13:43

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



Paper Size ISO A3
at Scale: 1:1,500

0 15 30 45 60

Meters

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

N

GHD

Horizon Power
Kimberley Biological Survey

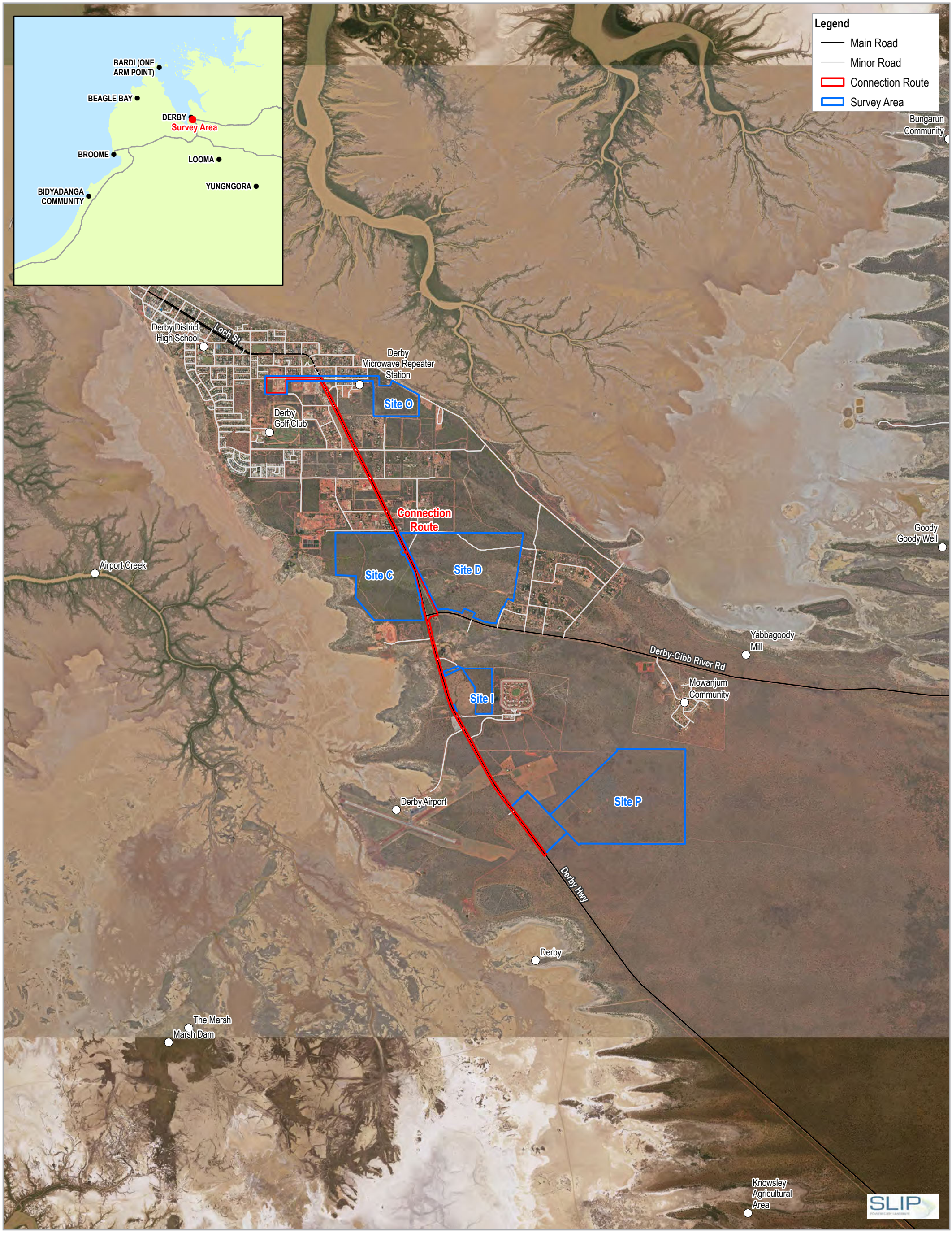
Fauna Habitat - Camballin/Looma

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

FIGURE 6

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_006_FaunaHabitat_Camballin_Rev0
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Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez



Paper Size ISO A3
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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 - 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
Print date: 10 Jul 2024 - 13:58

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

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

Paper Size ISO A3
at Scale: 1:175,000

0 2 4 6 8
Kilometers

N

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

GHD

Horizon Power
Kimberley Biological Survey

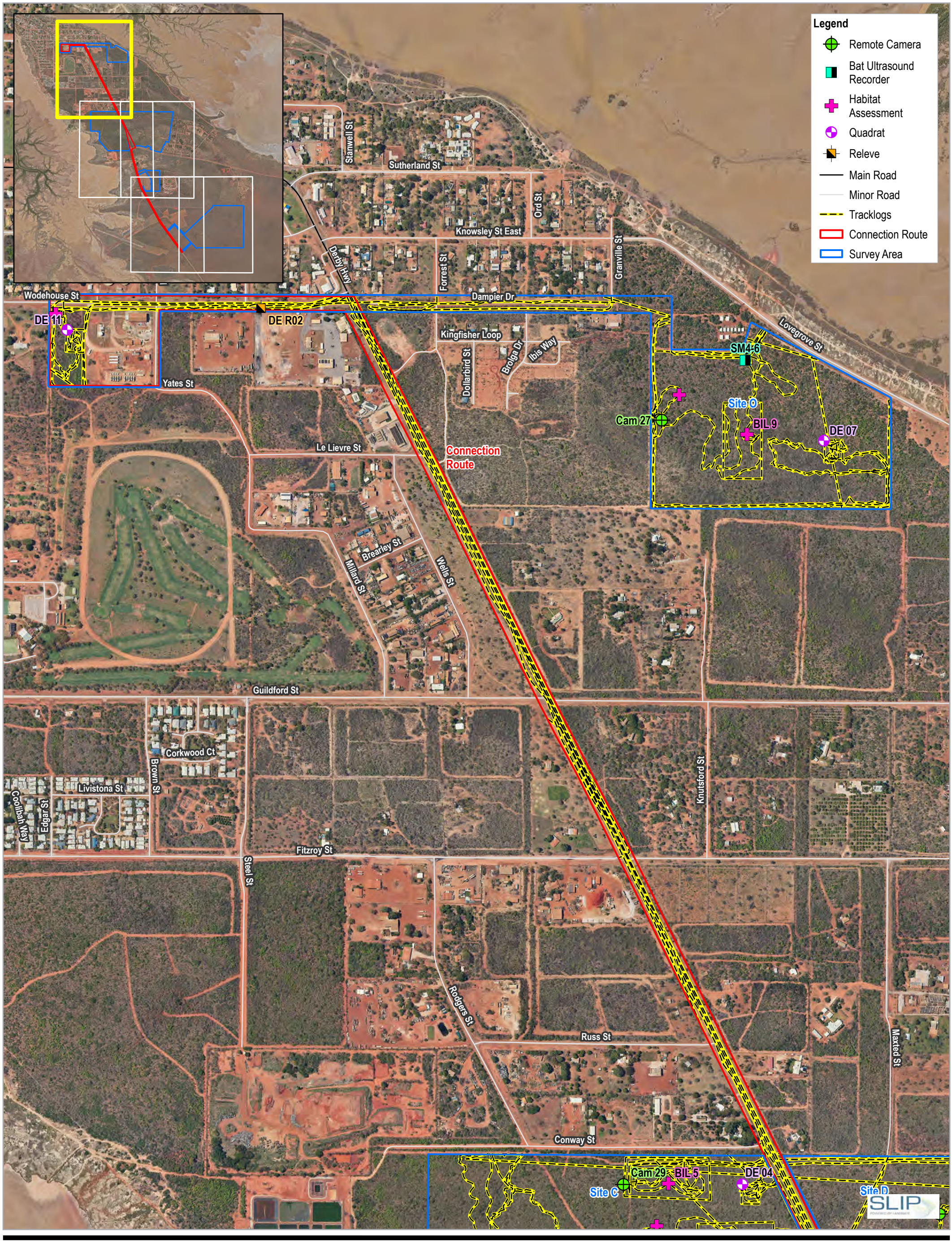
Project No. **12621719**
Revision No. **0**
Date **10/07/2024**

Environmental Constraints - Derby

FIGURE 8

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_008_EnvironmentalConstraints_Derby_Rev0
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Data source: World Imagery: Earthstar Geographics. 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

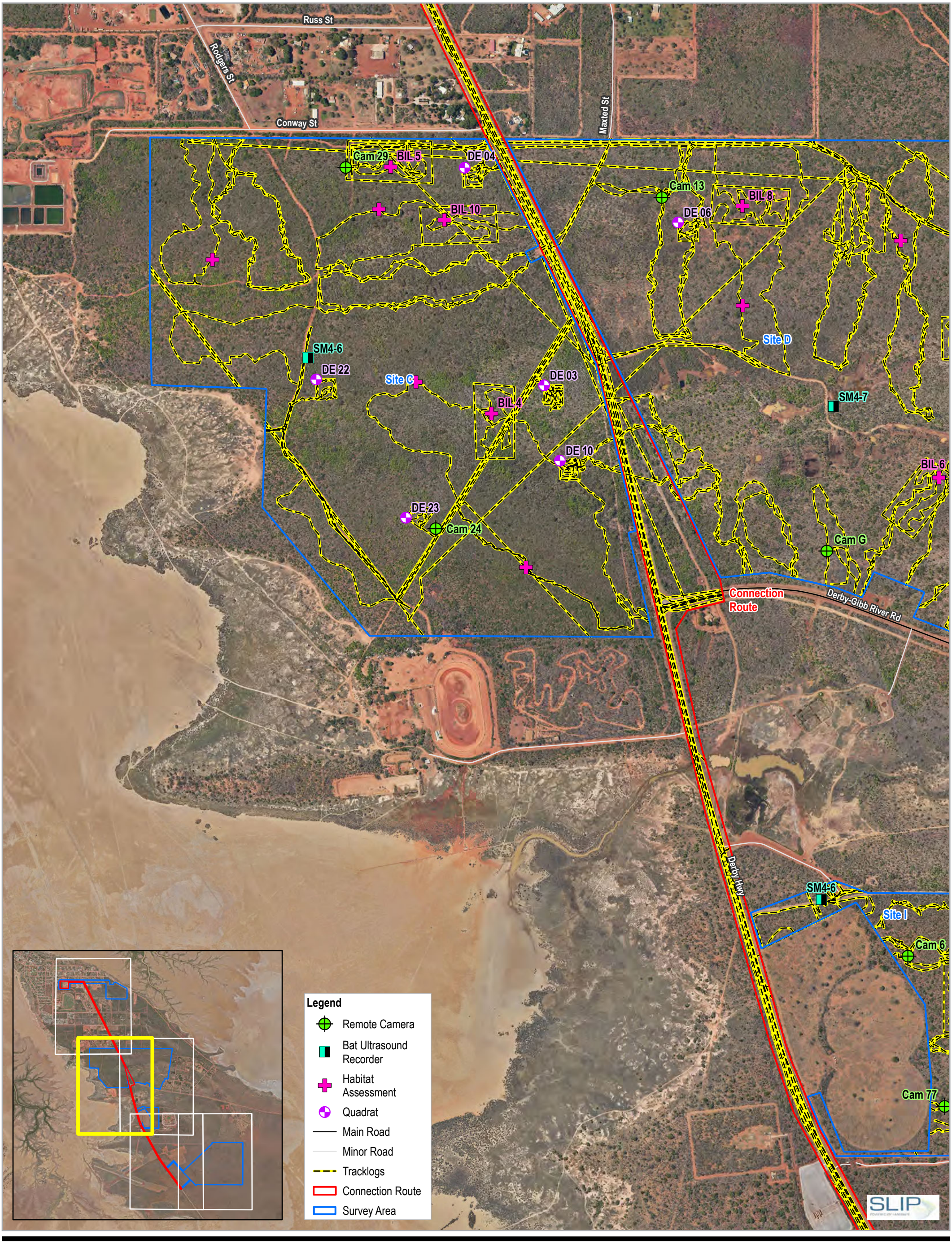
Survey Effort - Derby

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

FIGURE 9

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_009_SurveyEffort_Derby_Rev0
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Paper Size ISO A3
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0 100 200 300 400

Meters

N

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

Horizon Power
Kimberley Biological Survey

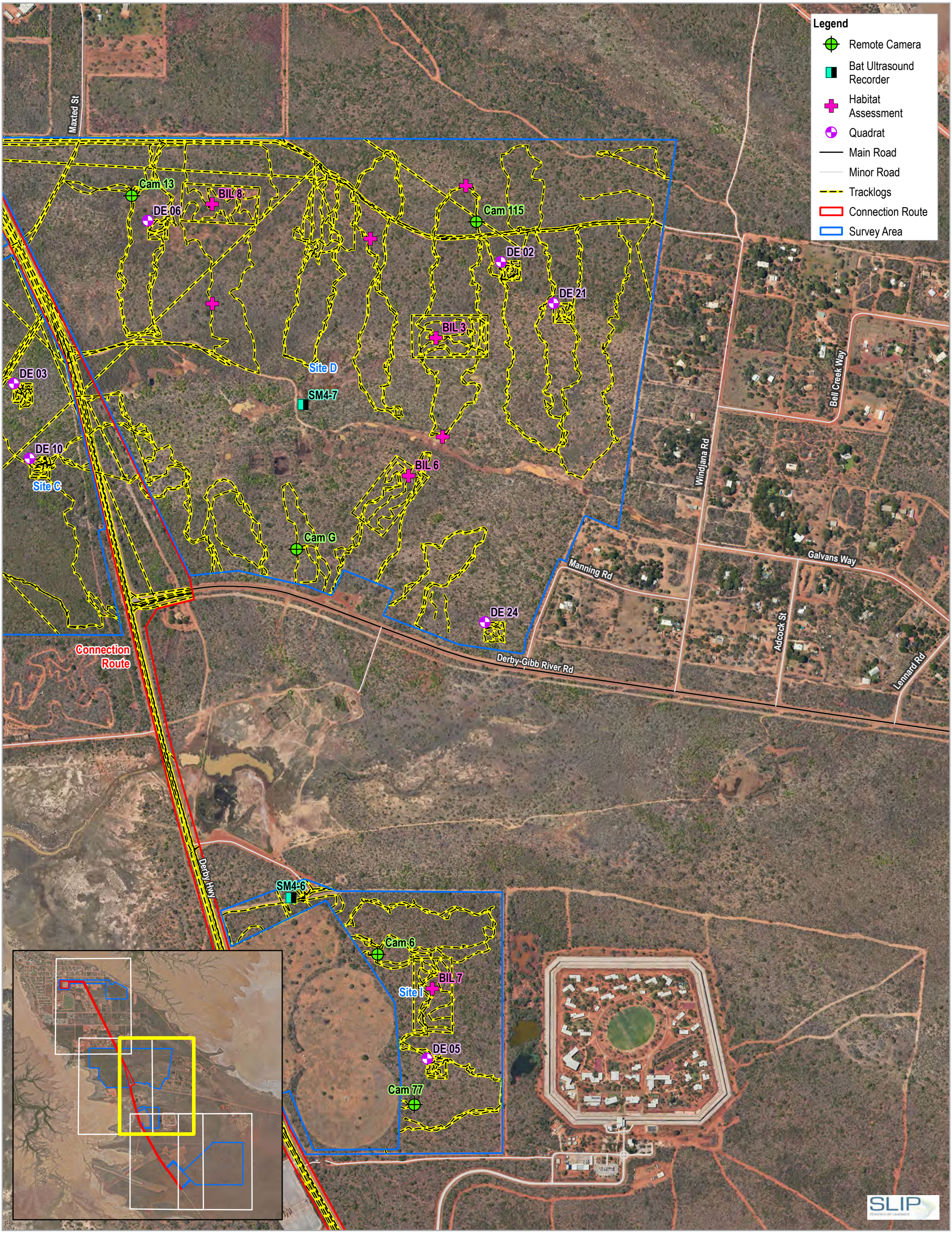
Survey Effort - Derby

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

FIGURE 9

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_009_SurveyEffort_Derby_Rev0
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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

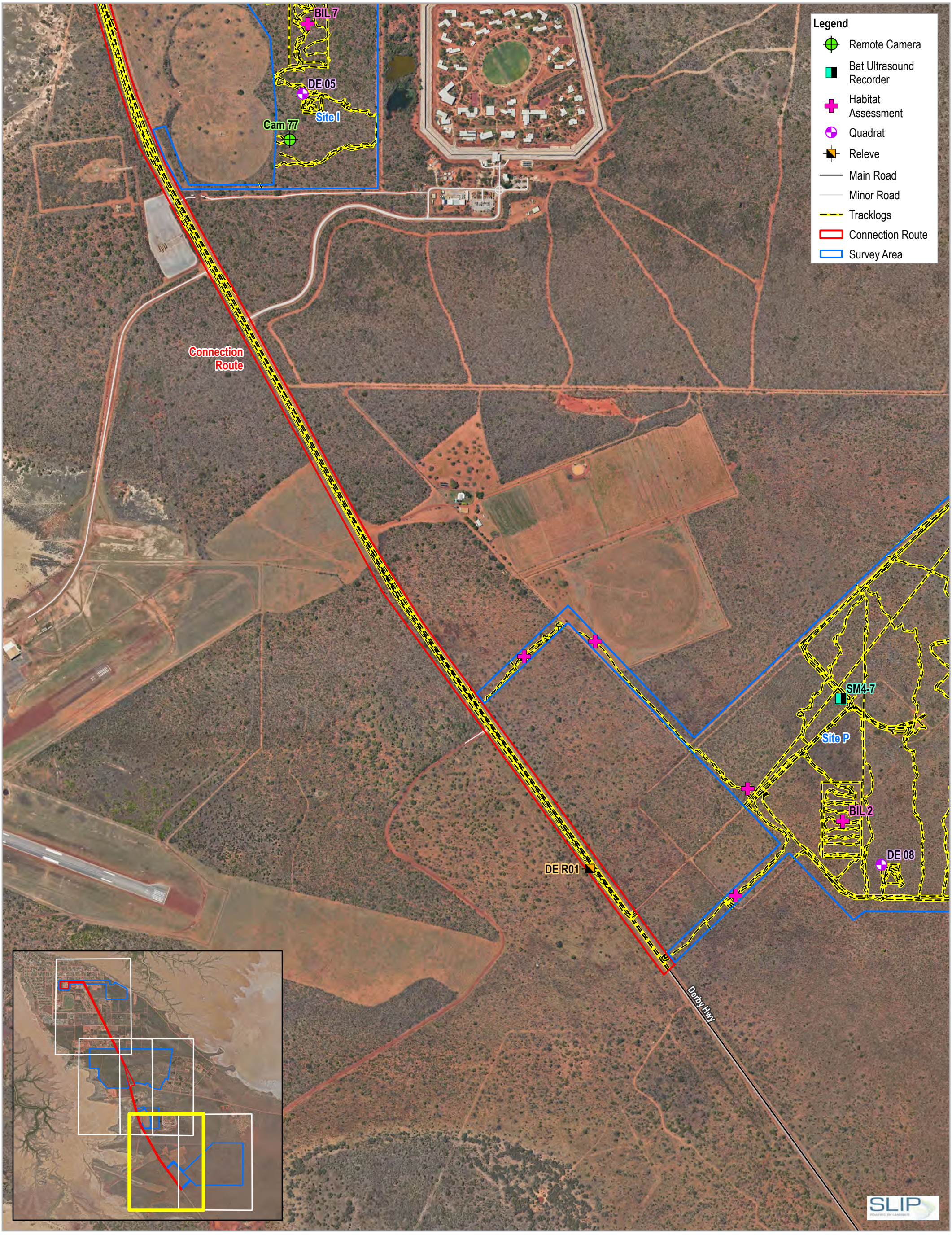
Survey Effort - Derby

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

Page 3 of 5
FIGURE 9

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_009_SurveyEffort_Derby_Rev0
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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

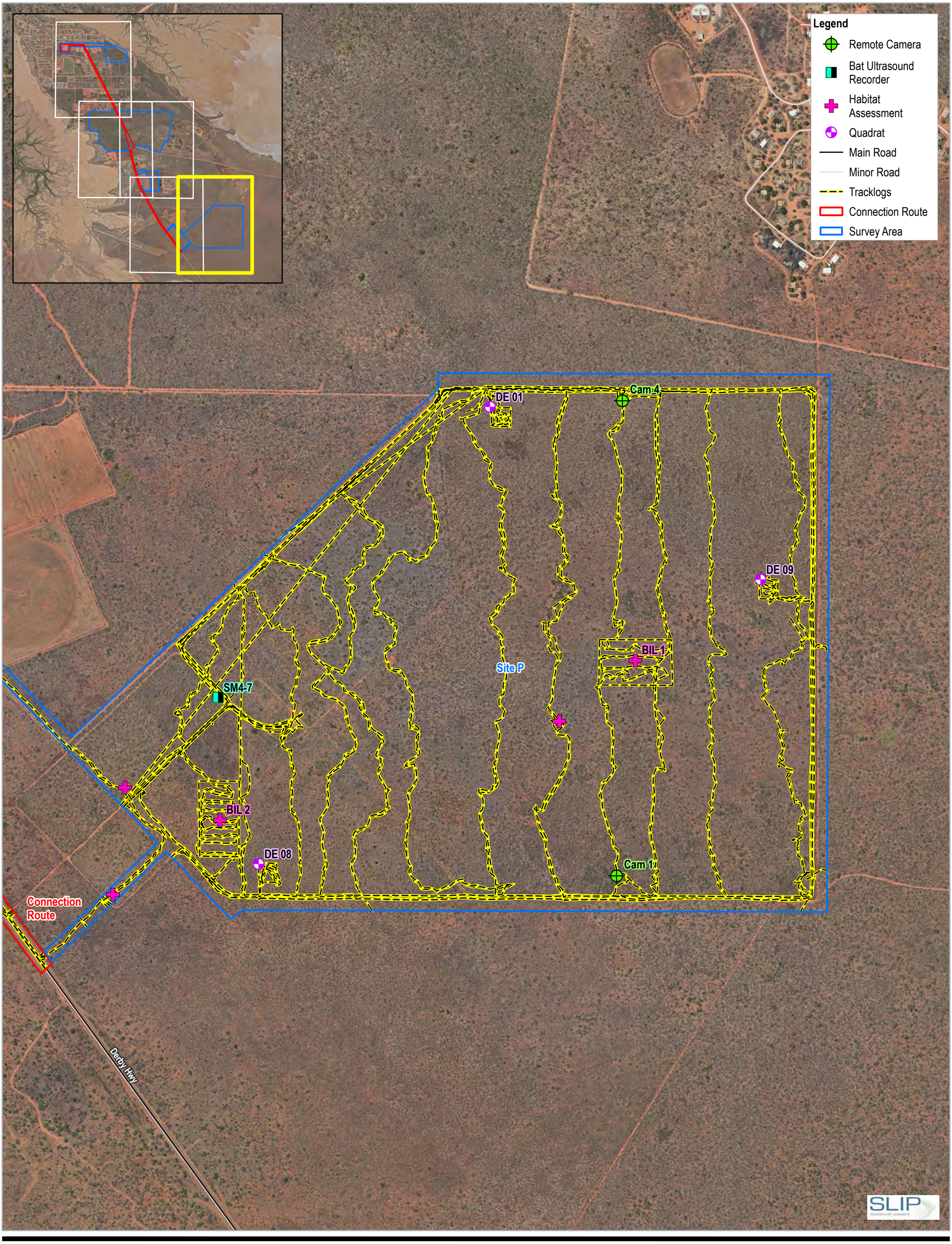
Survey Effort - Derby

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

FIGURE 9

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_009_SurveyEffort_Derby_Rev0
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Paper Size ISO A3
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0 100 200 300 400
Meters

N

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

Horizon Power
Kimberley Biological Survey

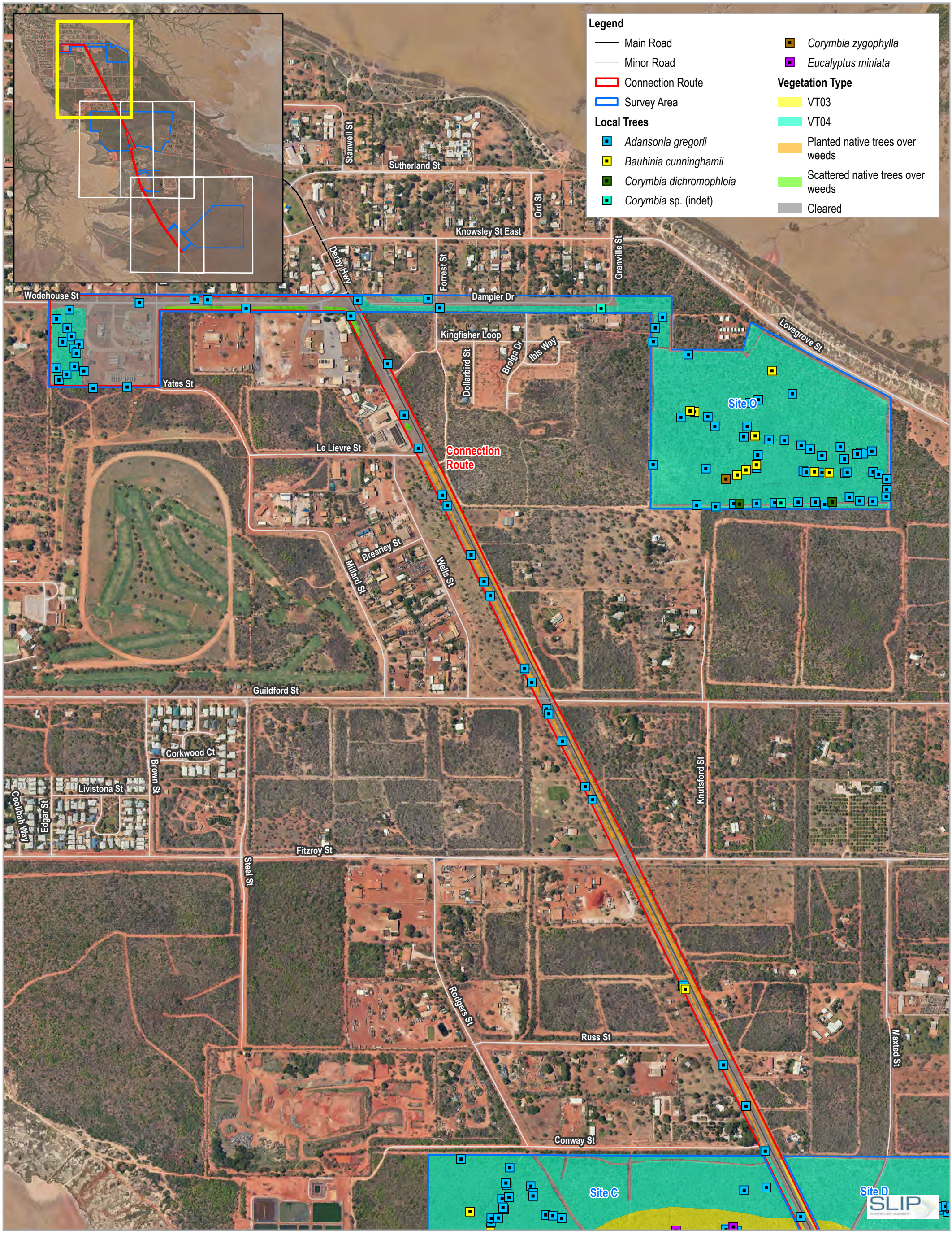
Survey Effort - Derby

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

FIGURE 9

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_009_SurveyEffort_Derby_Rev0
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Data source: Landgate_Subscription_Imagery\WANow: . Created by: klabez



Paper Size ISO A3
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0 100 200 300 400
Meters

N

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

Horizon Power
Kimberley Biological Survey

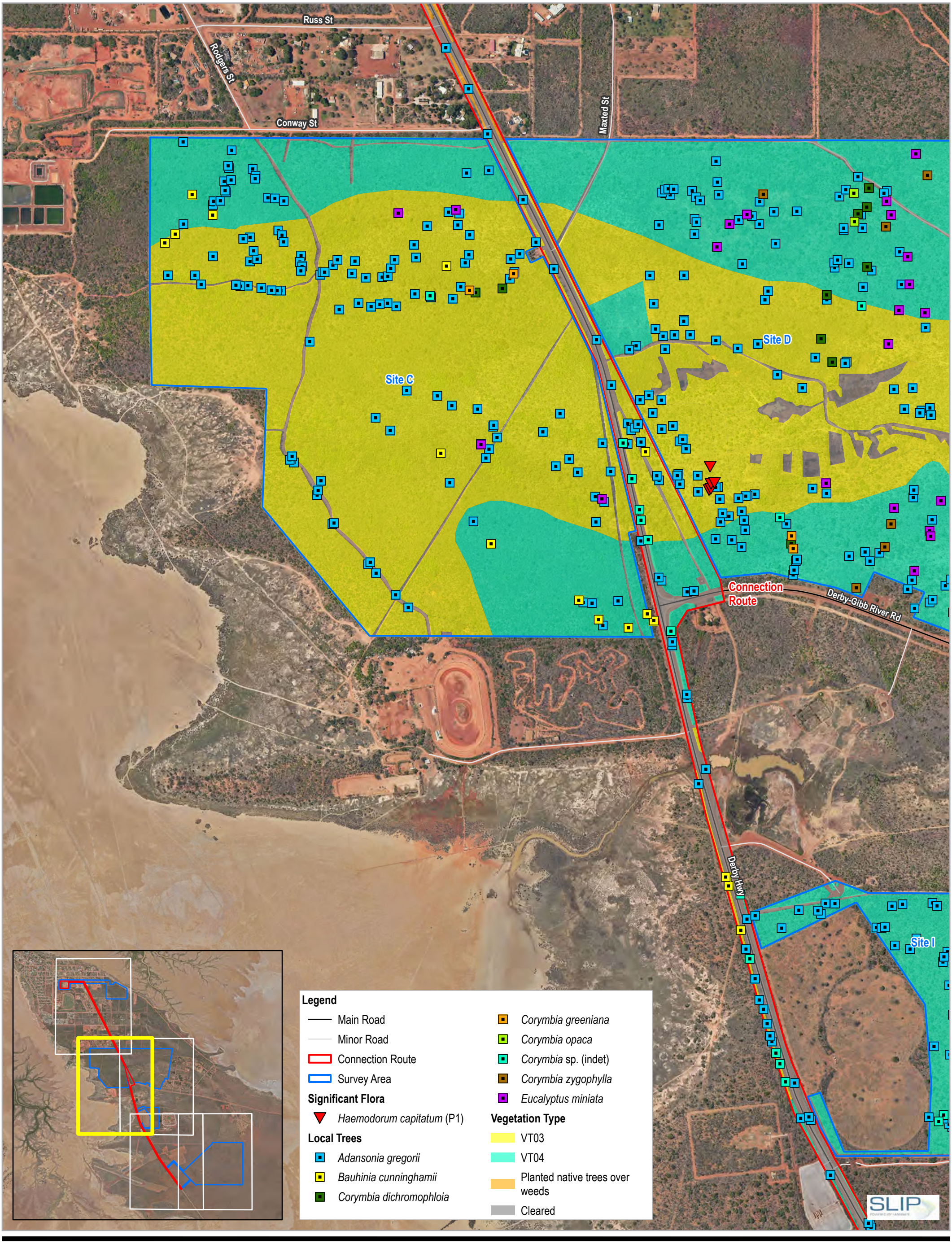
Vegetation Types, Significant Flora and Local Trees - Derby

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

Page 1 of 5
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 - 14:20

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



Paper Size ISO A3
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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

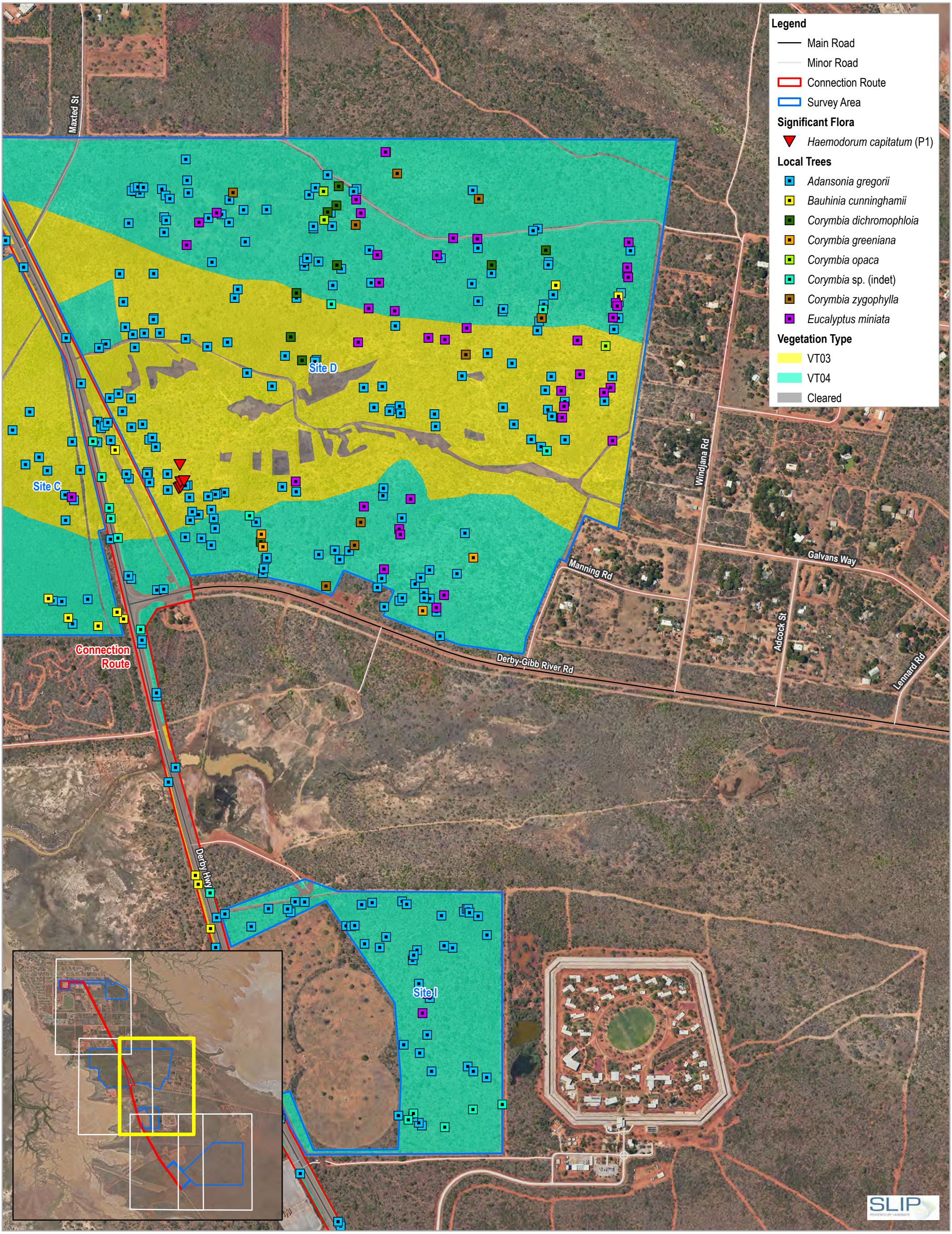
Vegetation Types, Significant Flora and Local Trees - Derby

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
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Paper Size ISO A3
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Meters

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

N

GHD

Horizon Power
Kimberley Biological Survey

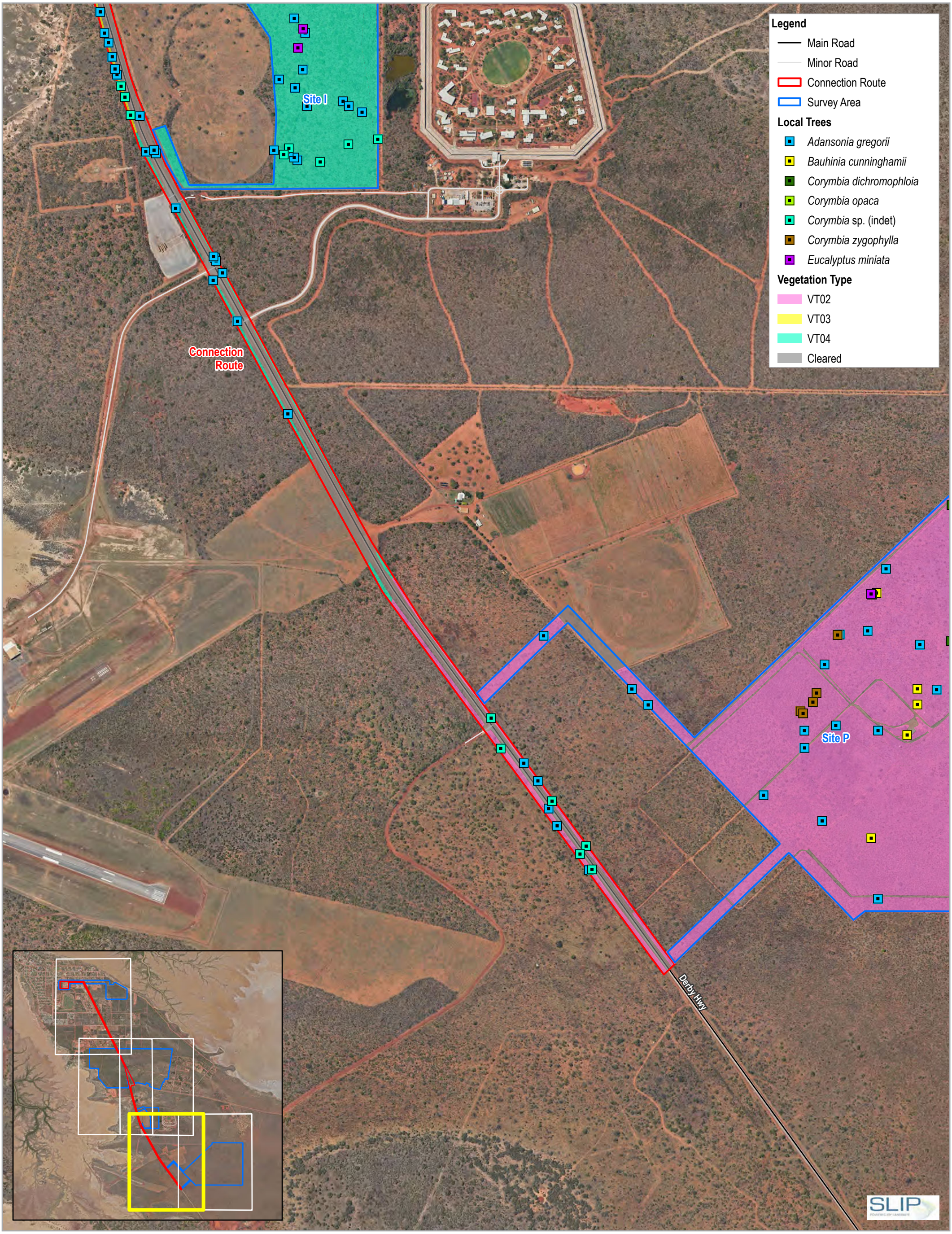
Vegetation Types, Significant Flora and Local Trees - Derby

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
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Paper Size ISO A3
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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

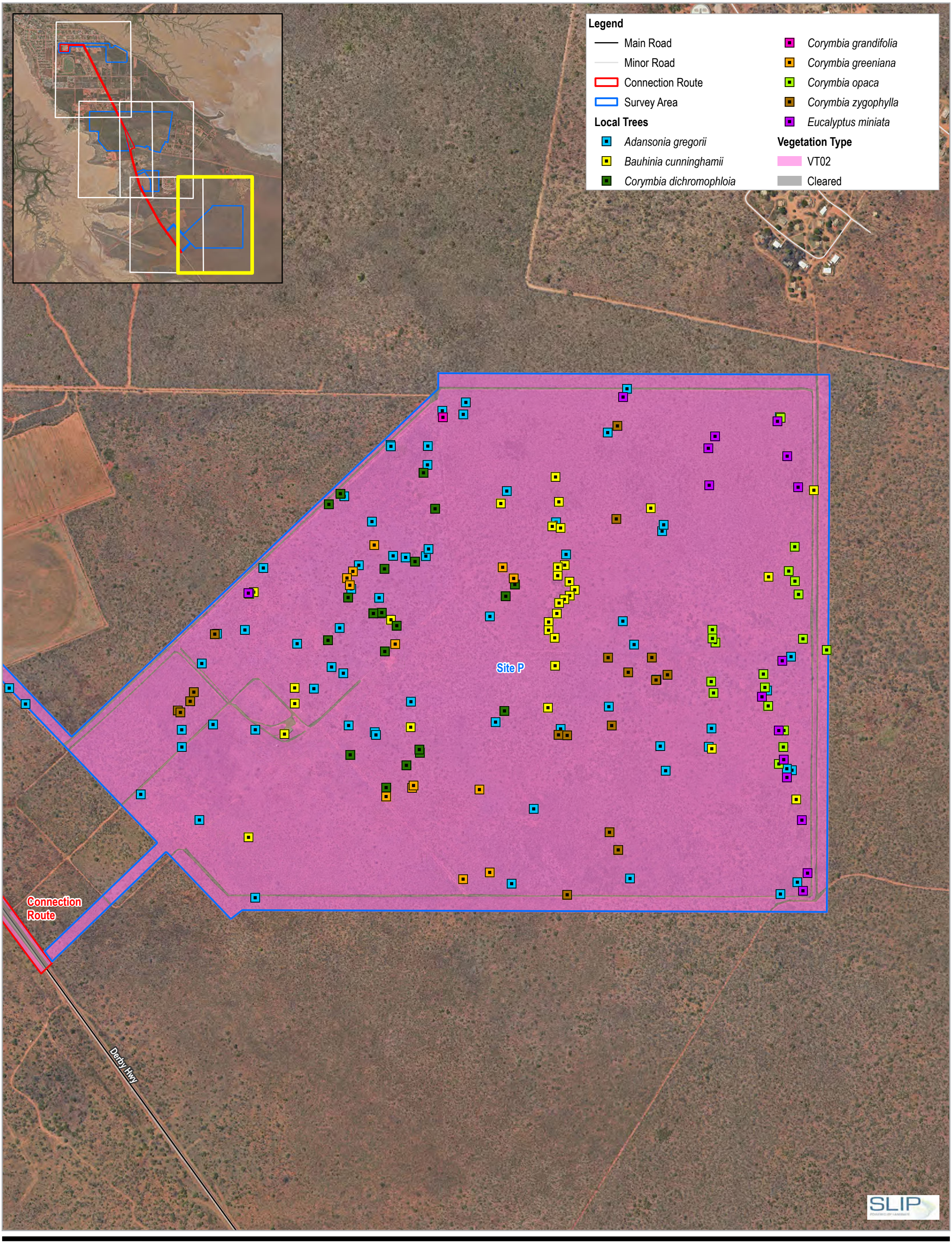
Vegetation Types, Significant Flora and Local Trees - Derby

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
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Paper Size ISO A3
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0 100 200 300 400

Meters

N

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

Horizon Power
Kimberley Biological Survey

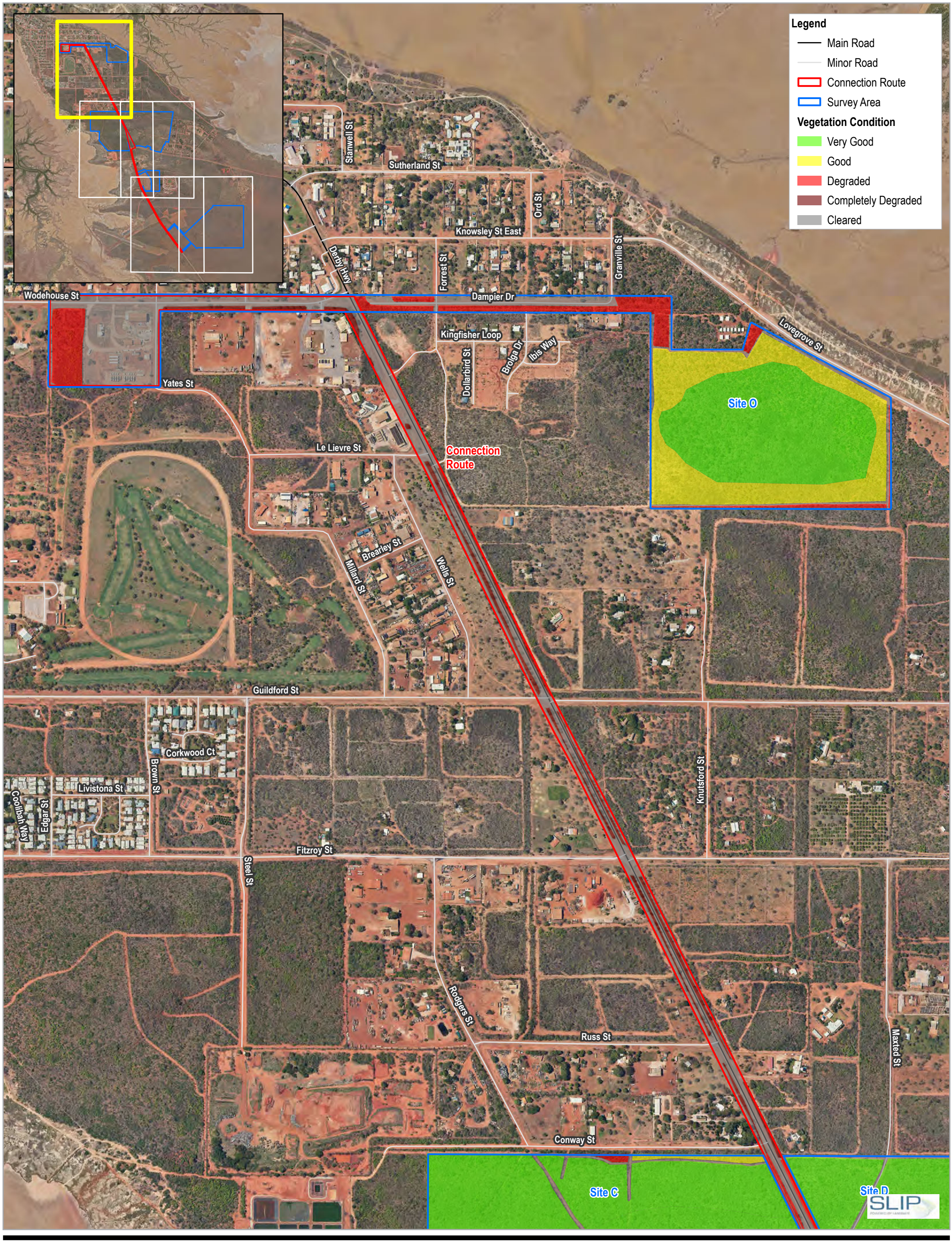
Vegetation Types, Significant Flora and Local Trees - Derby

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
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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

Horizon Power
Kimberley Biological Survey

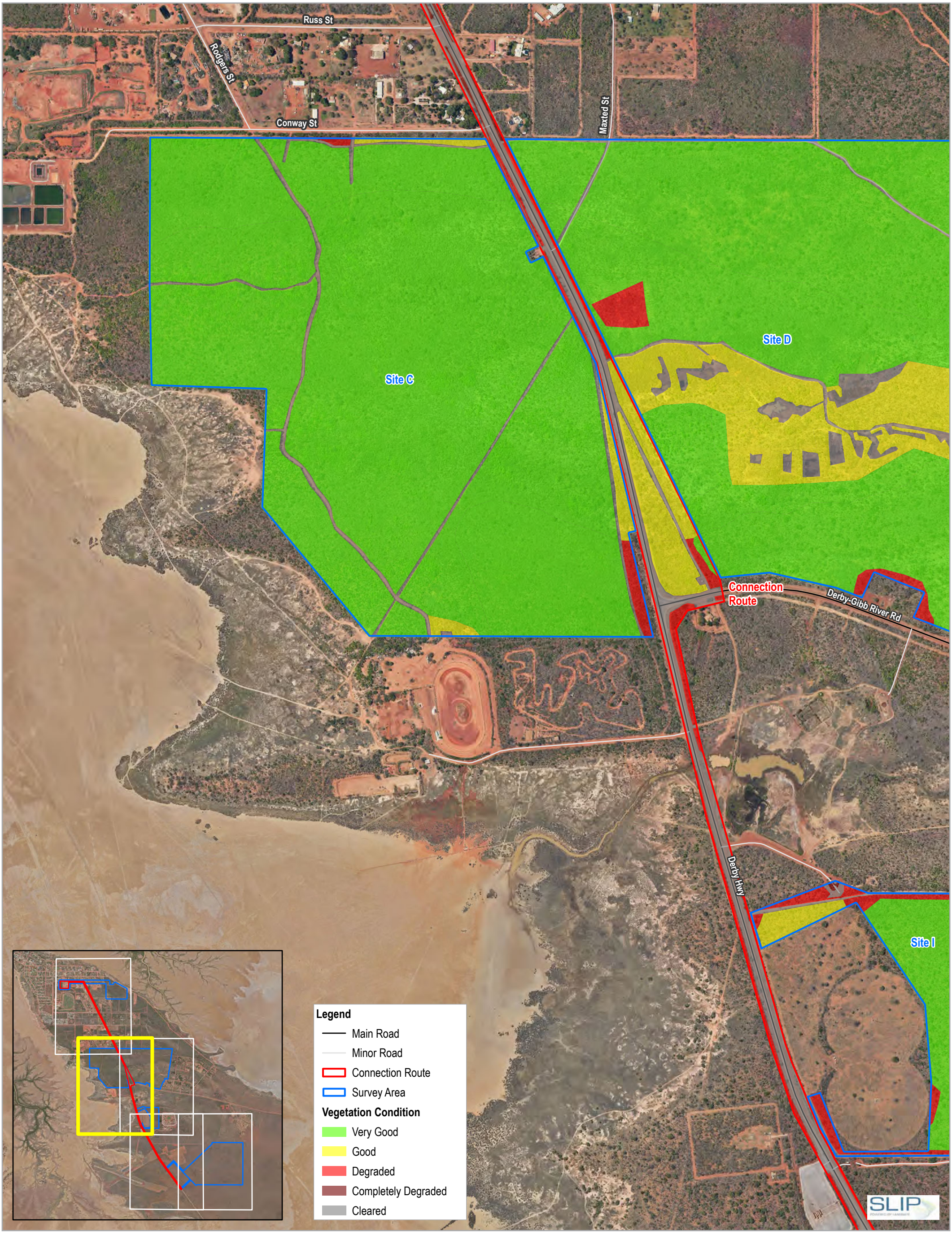
Vegetation Condition - Derby

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
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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

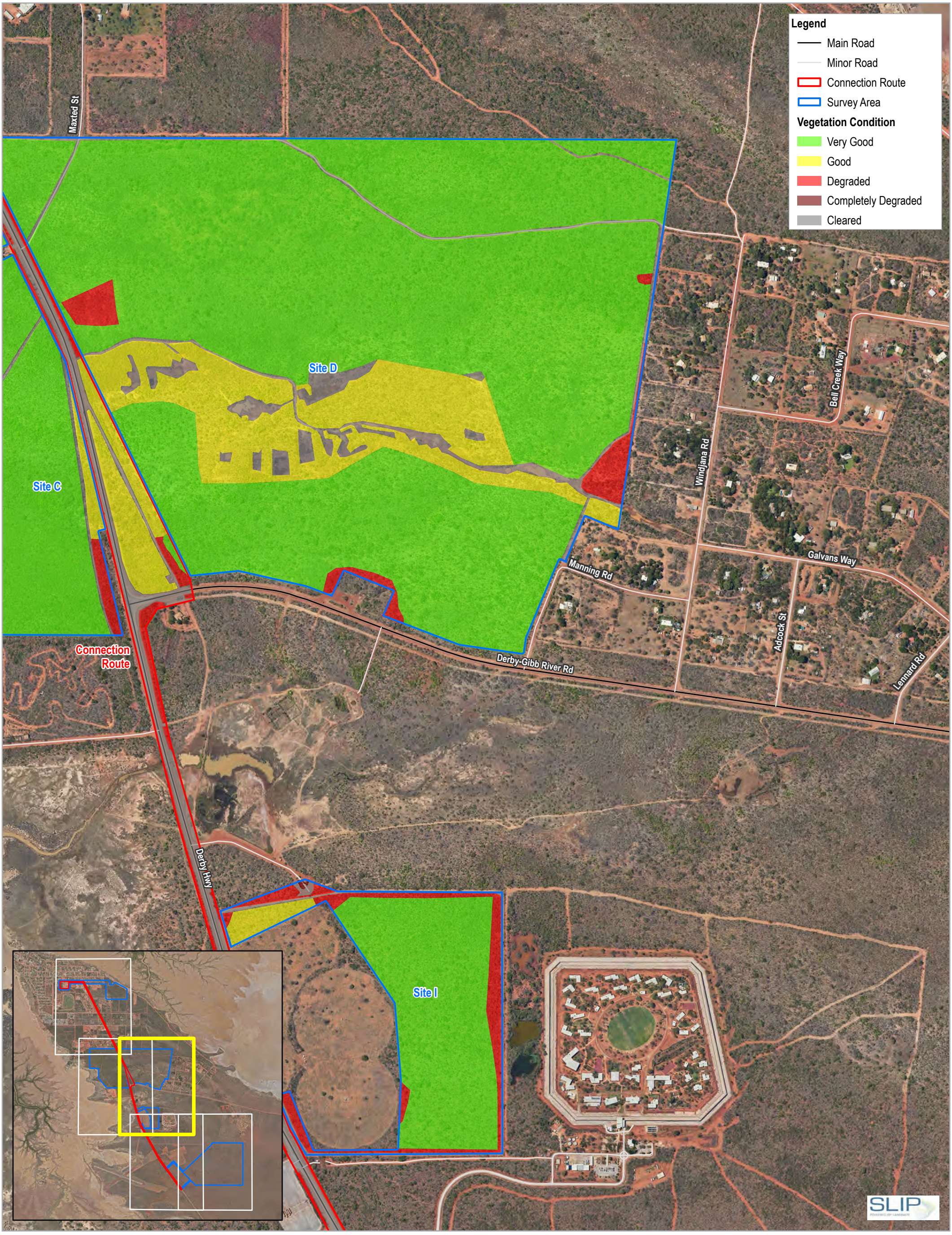
Project No. **12621719**
Revision No. **0**
Date **10/07/2024**

Vegetation Condition - Derby

FIGURE 11

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_011_VegCondition_Derby_Rev0
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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

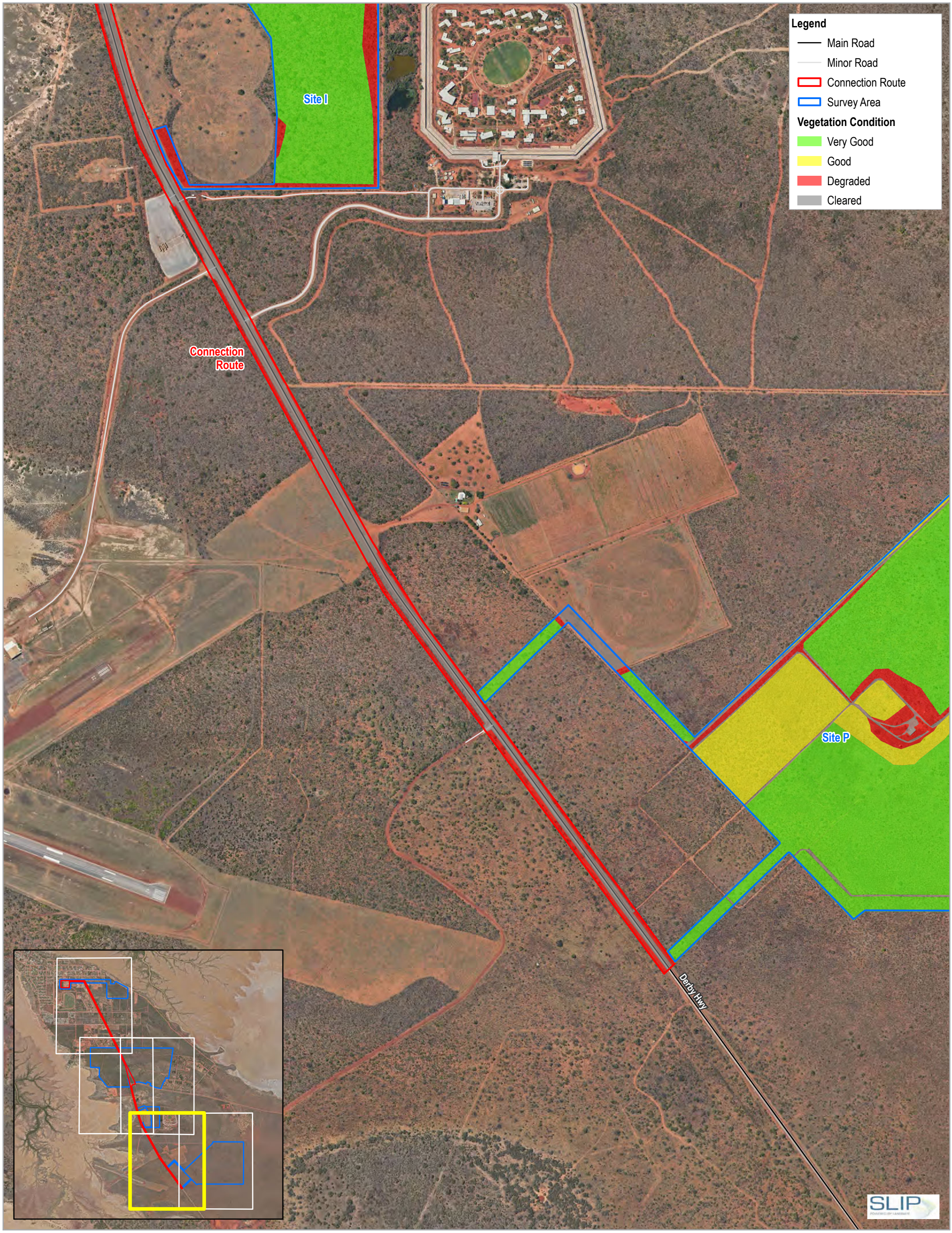
Vegetation Condition - Derby

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

FIGURE 11

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Print date: 10 Jul 2024 - 14:38

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

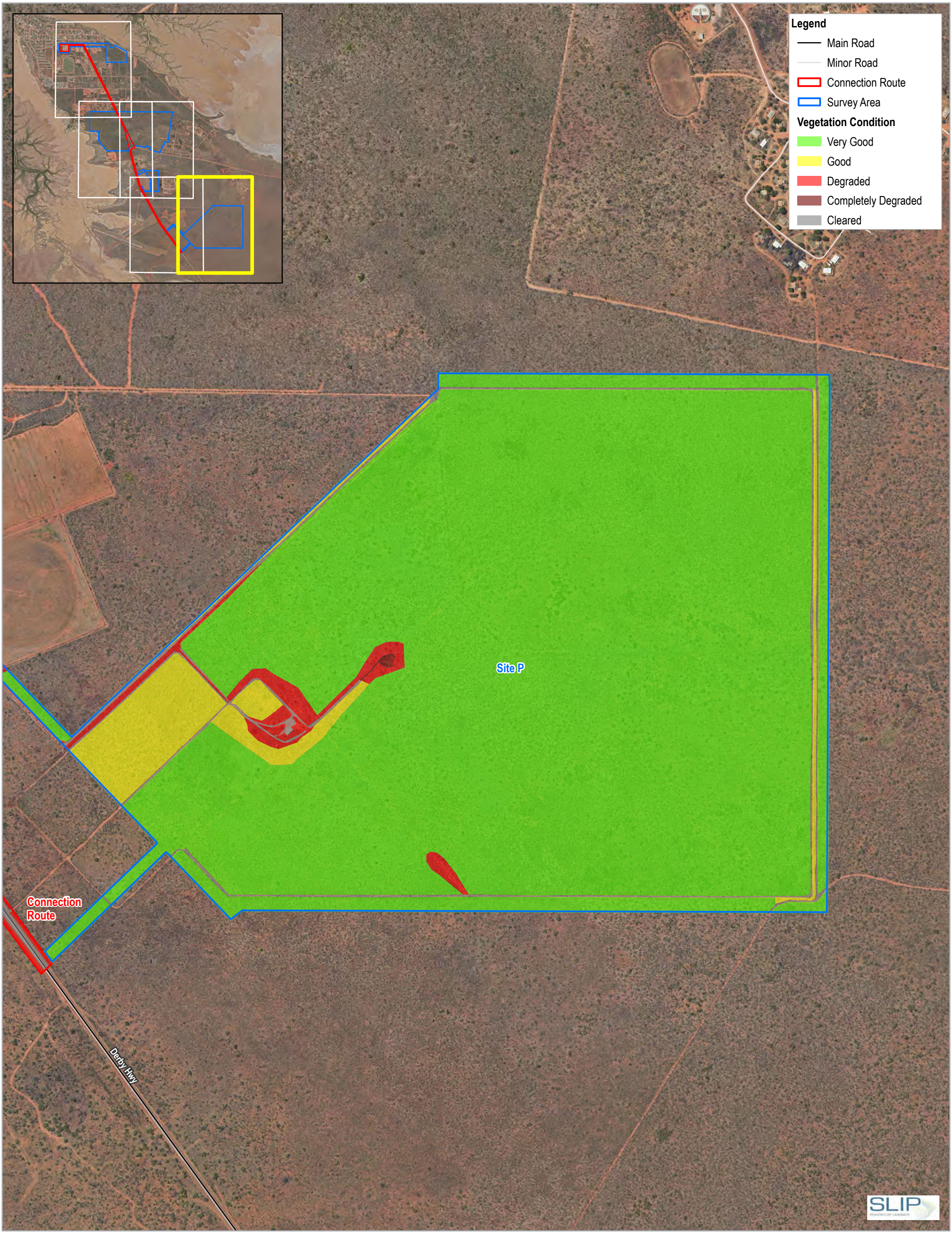
Vegetation Condition - Derby

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
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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

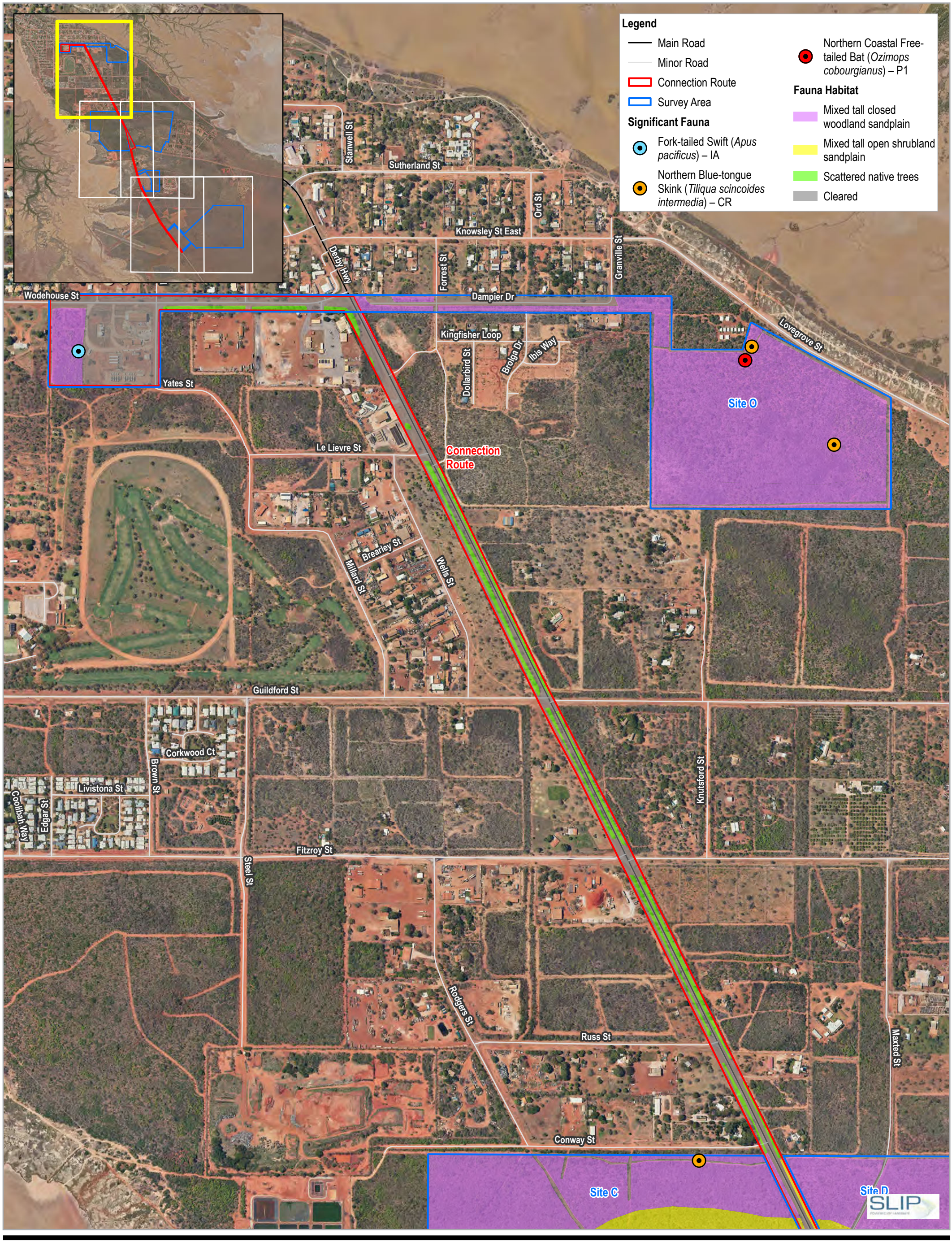
Vegetation Condition - Derby

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

Page 5 of 5
FIGURE 11

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_011_VegCondition_Derby_Rev0
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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

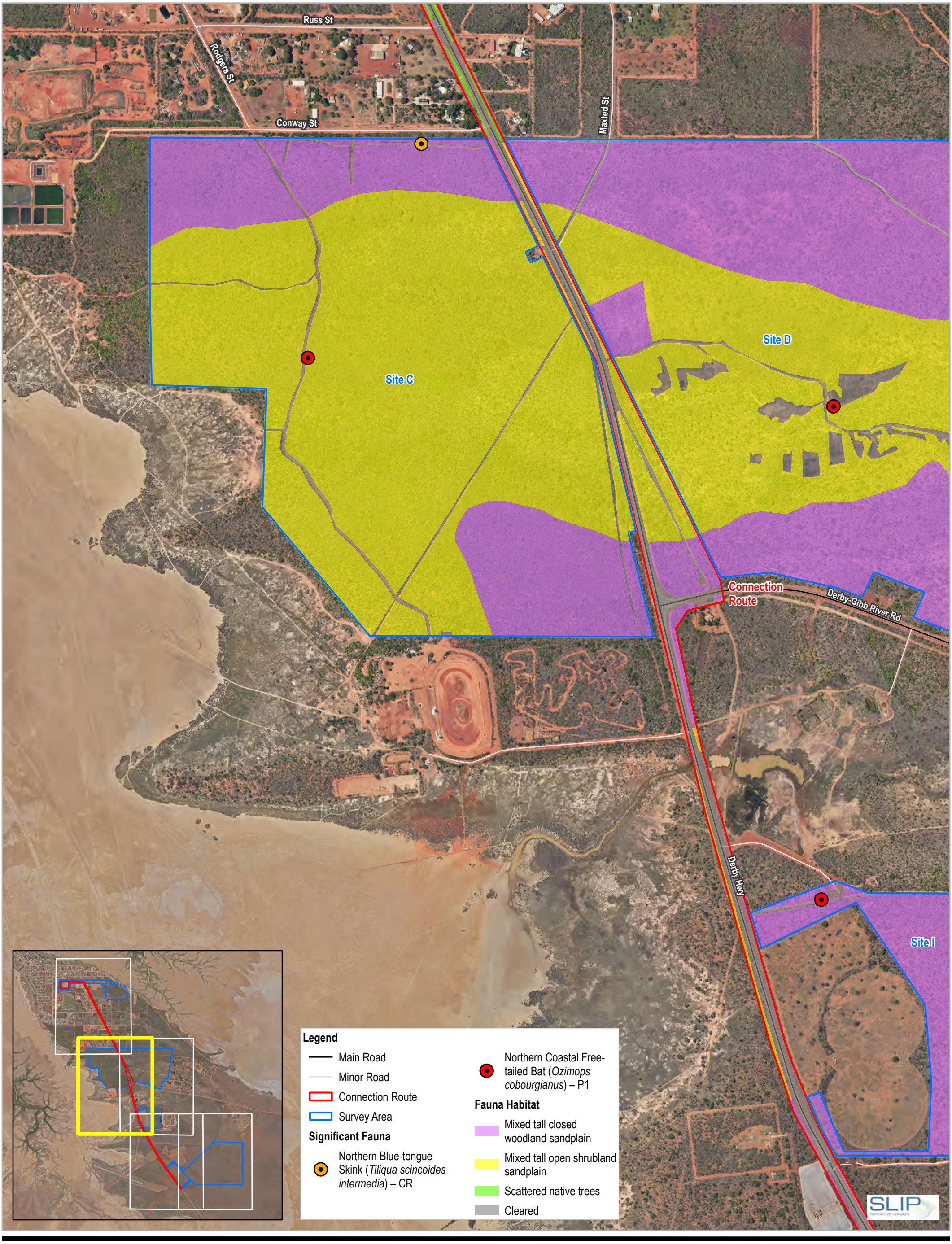
Fauna Habitat and Significant Fauna - Derby

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
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Meters

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

N

GHD

Horizon Power
Kimberley Biological Survey

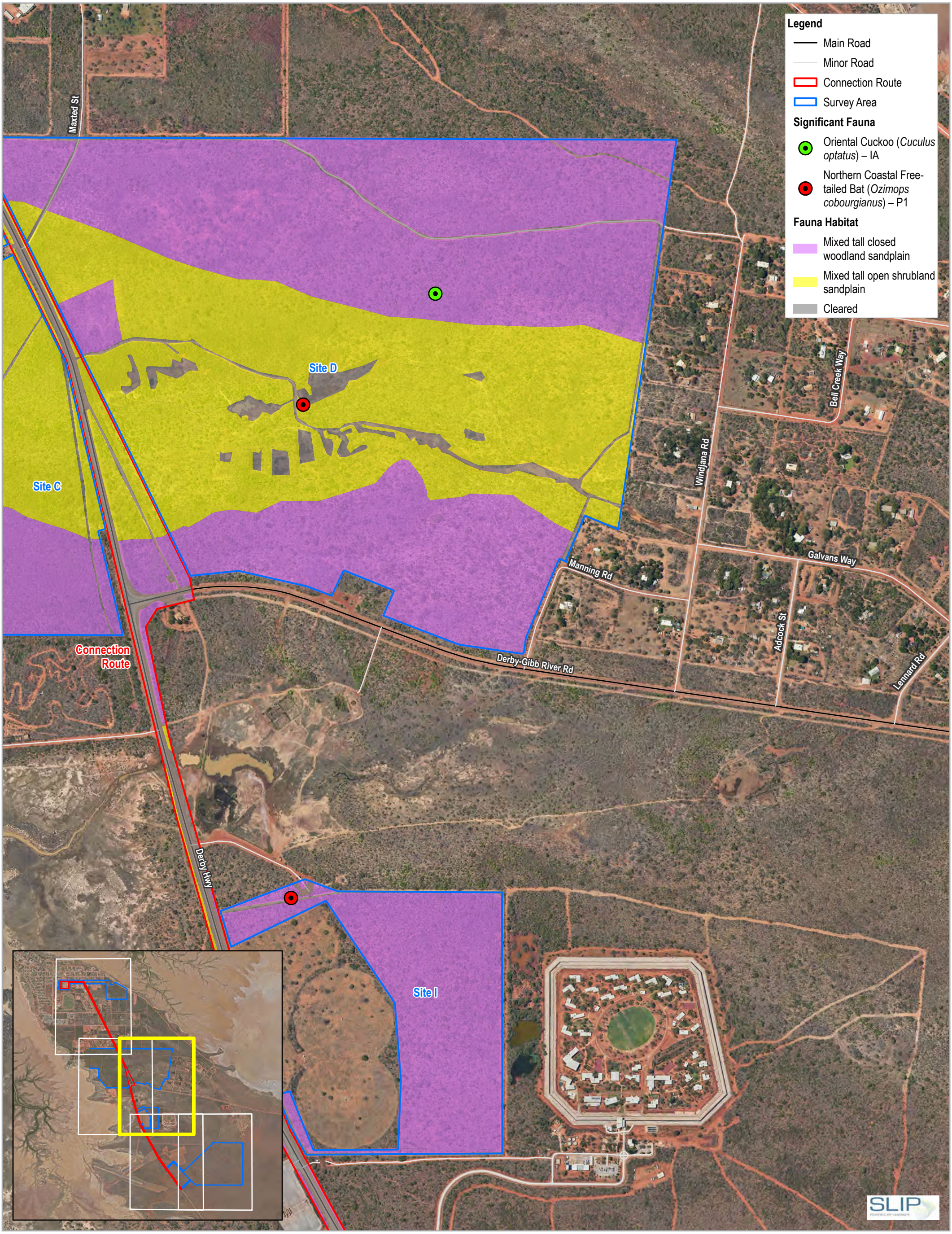
Fauna Habitat and Significant Fauna - Derby

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
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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

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

Site I

Connection Route

Site P

Derby Hwy

Legend

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

Significant Fauna

- Northern Coastal Free-tailed Bat (*Ozimops cobourgianus*) – P1

Fauna Habitat

- Mixed tall closed woodland sandplain
- Mixed tall open shrubland sandplain
- Open eucalypt woodland
- 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

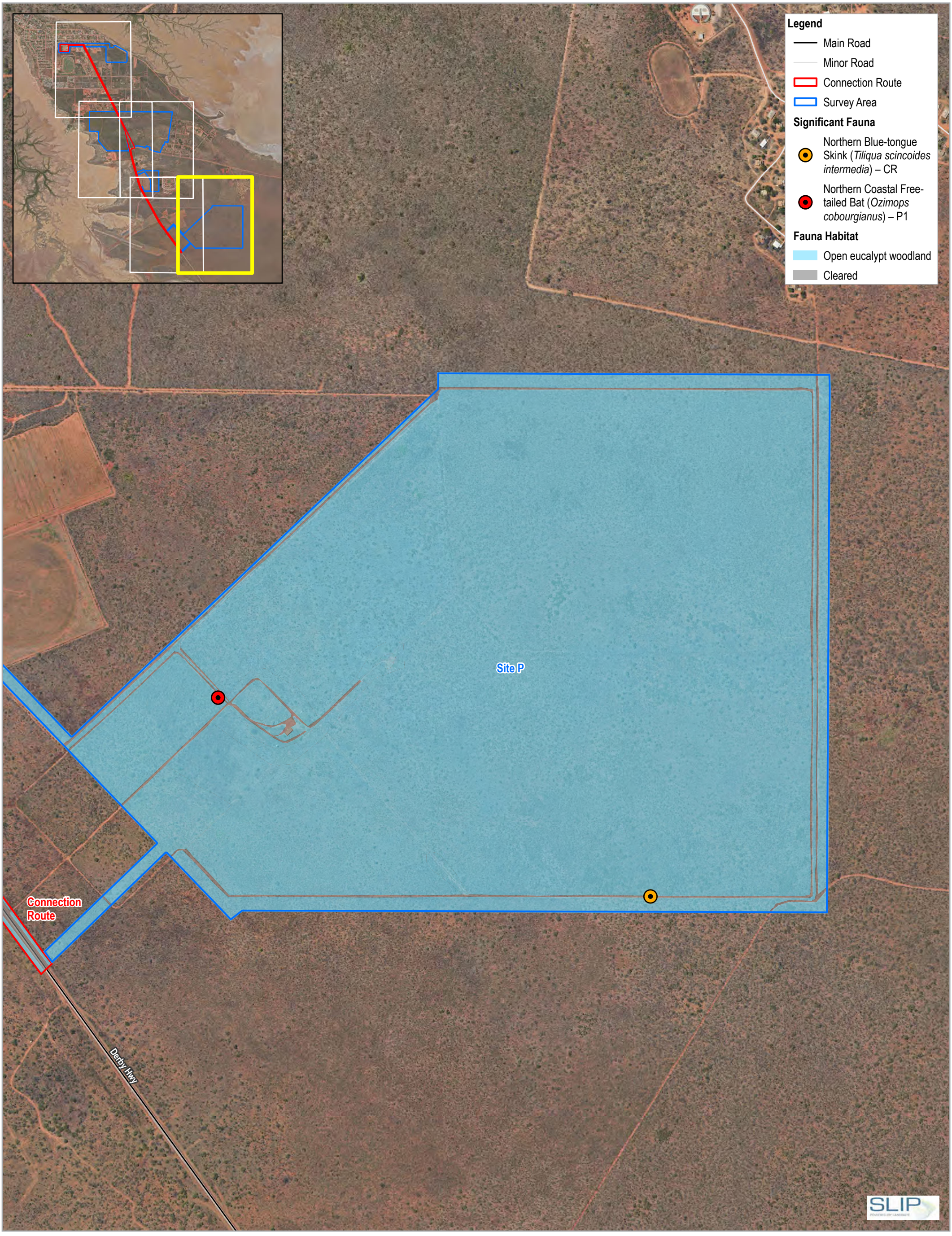
Fauna Habitat and Significant Fauna - Derby

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
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Meters

Map Projection: Transverse Mercator
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Grid: GDA2020 MGA Zone 51

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GHD

Horizon Power
Kimberley Biological Survey

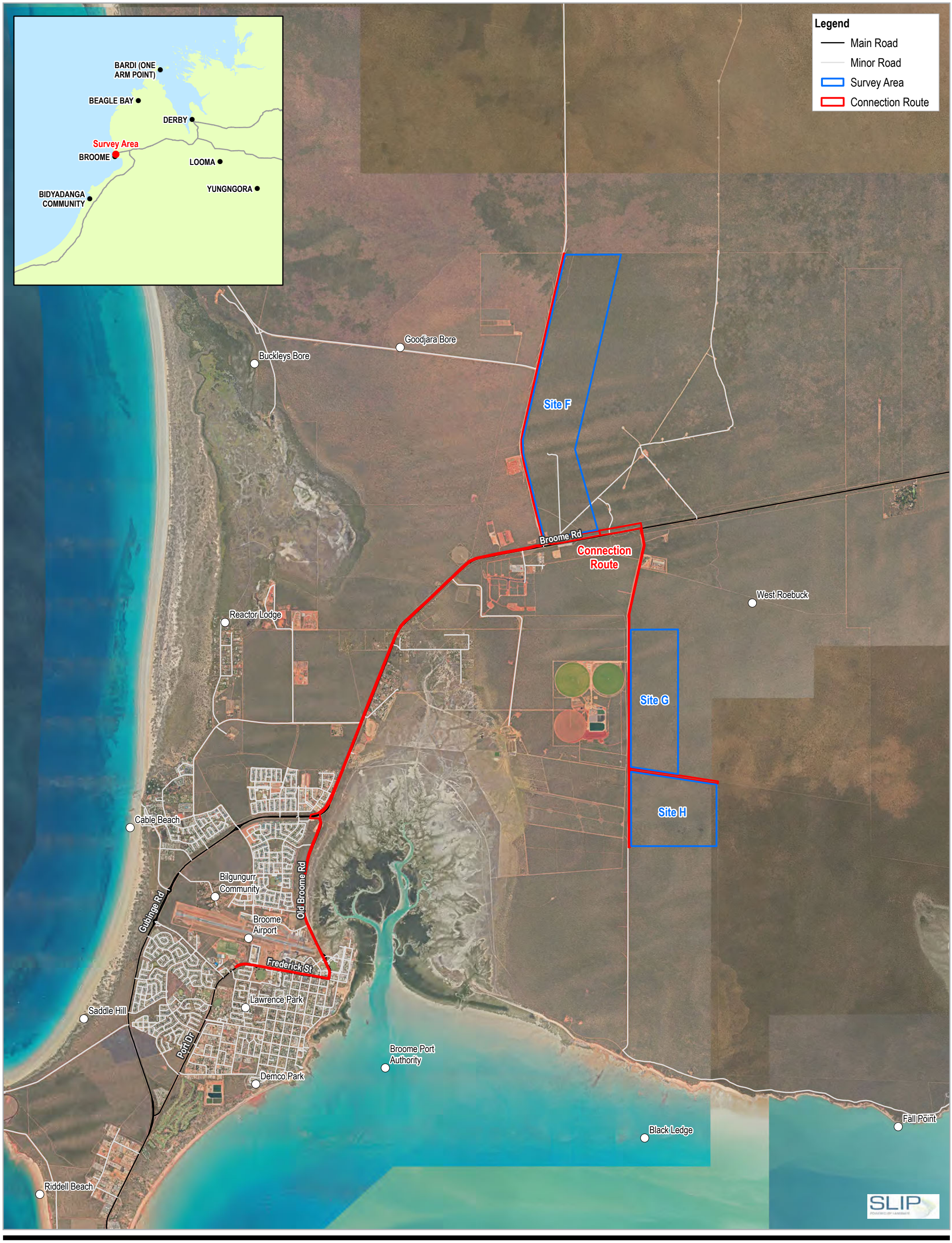
Fauna Habitat and Significant Fauna - Derby

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
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Paper Size ISO A3
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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

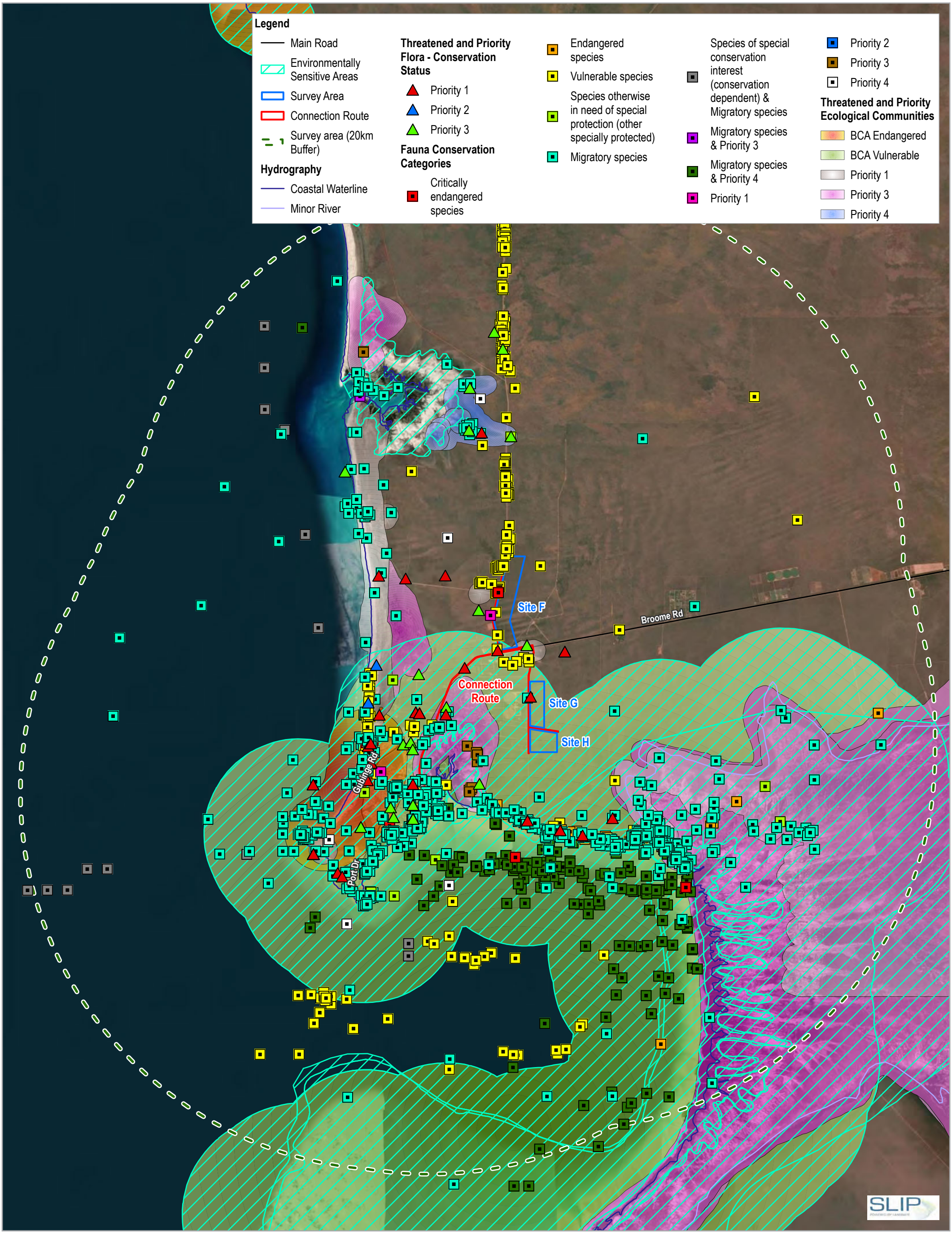
Location - Broome

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
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0 2 4 6 8
Kilometers

N

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

GHD

Horizon Power
Kimberley Biological Survey

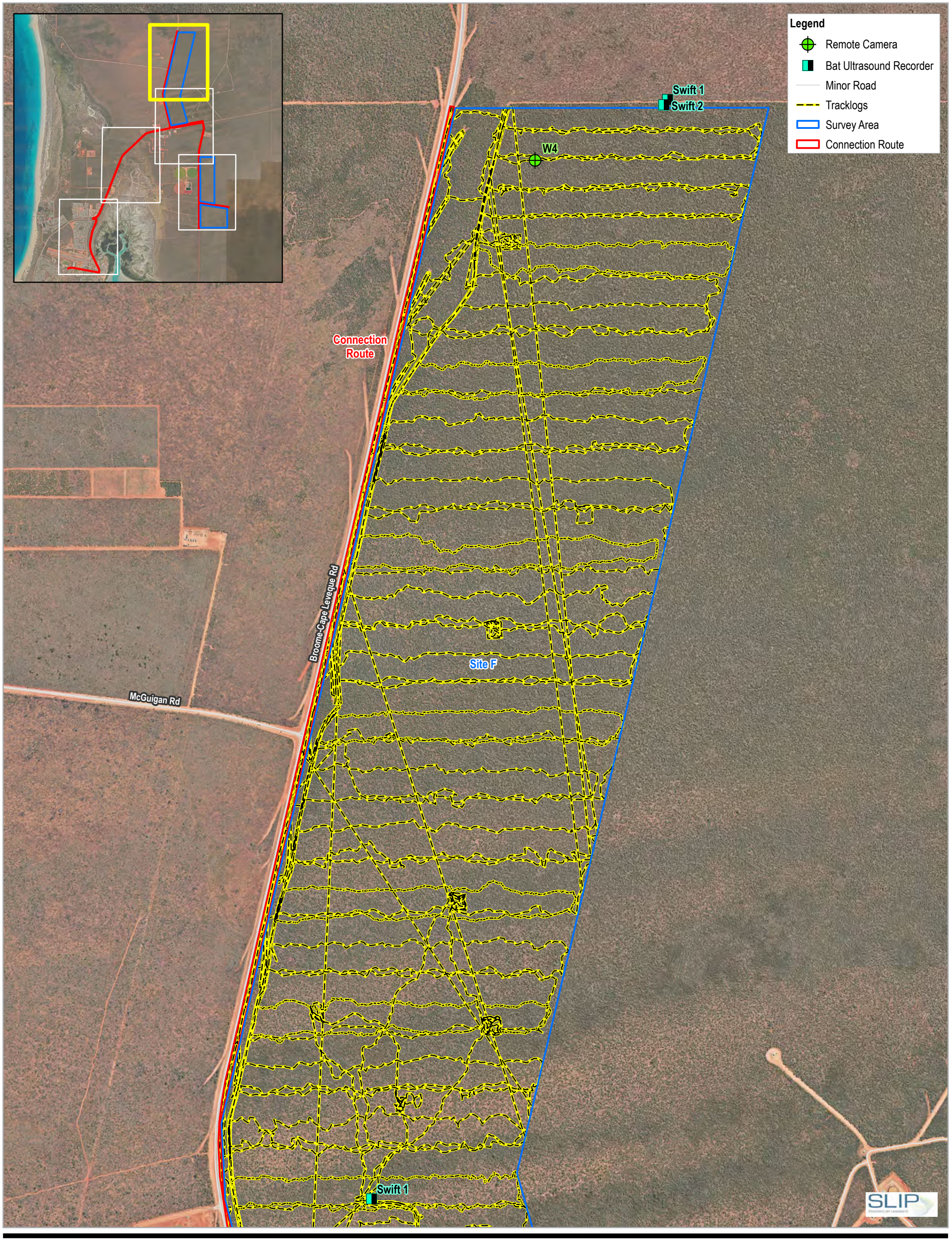
Project No. **12621719**
Revision No. **0**
Date **10/07/2024**

Environmental Constraints - Broome

FIGURE 14

\\ghdnet\ghd\AU\Perth\Projects\61\12621719\GIS\Maps\Working\12621719_Figures_Working\12621719_Figures_Working.aprx\12621719_014_EnvironmentalConstraints_Broome_Rev0
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Meters

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Grid: GDA2020 MGA Zone 51

N

GHD

Horizon Power
Kimberley Biological Survey

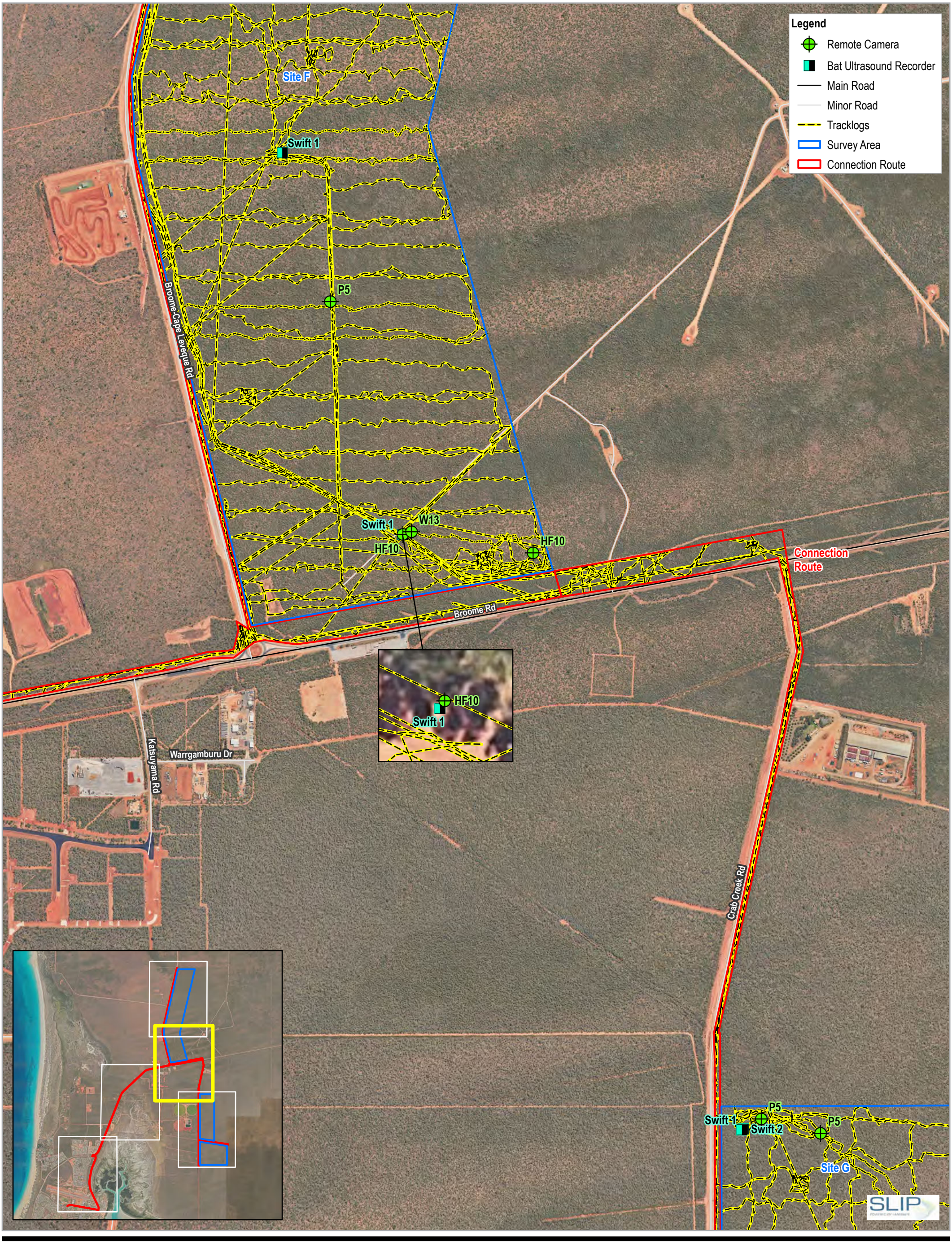
Survey Effort - Broome

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



Paper Size ISO A3
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Meters

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

N

GHD

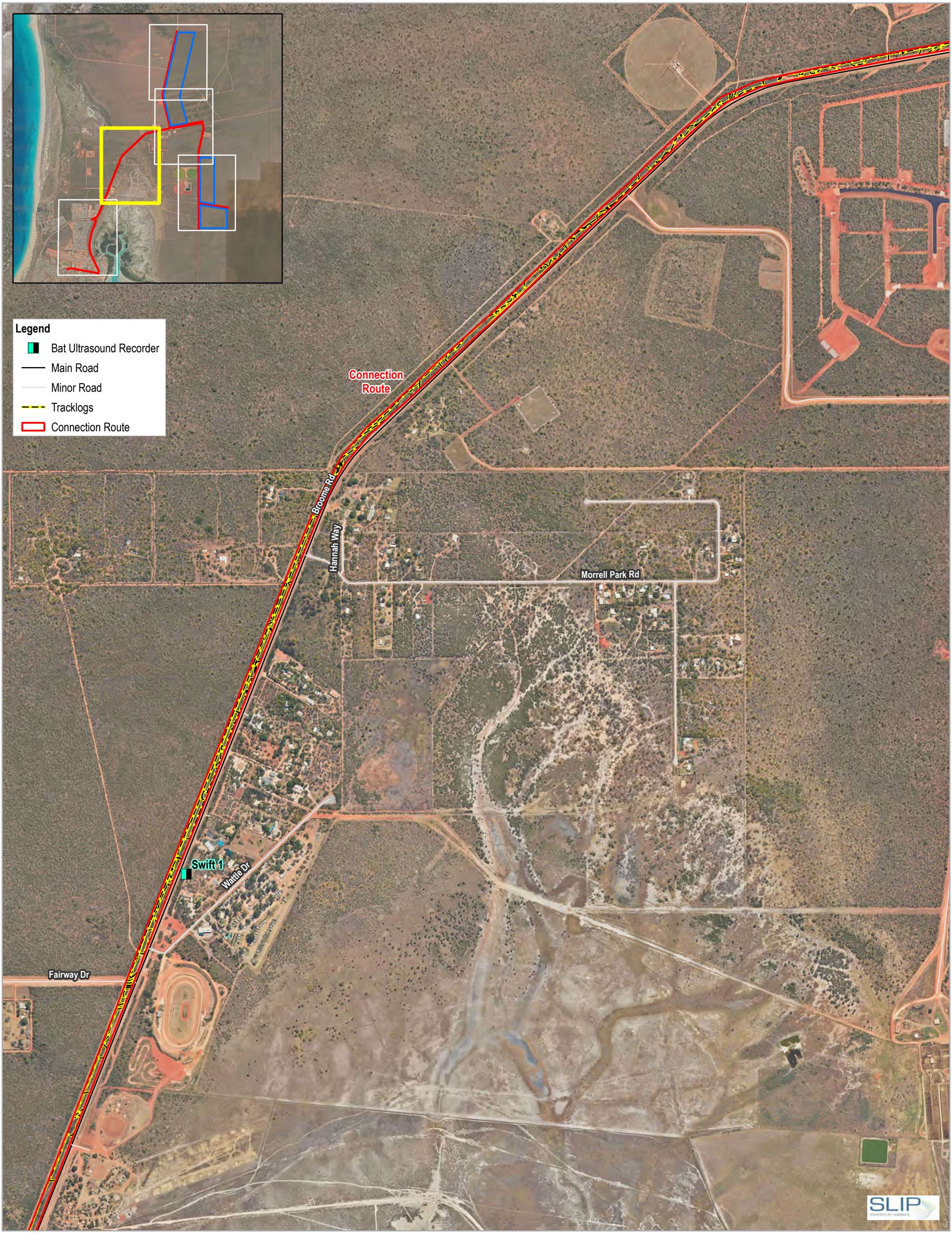
Horizon Power
Kimberley Biological Survey

Survey Effort - 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
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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

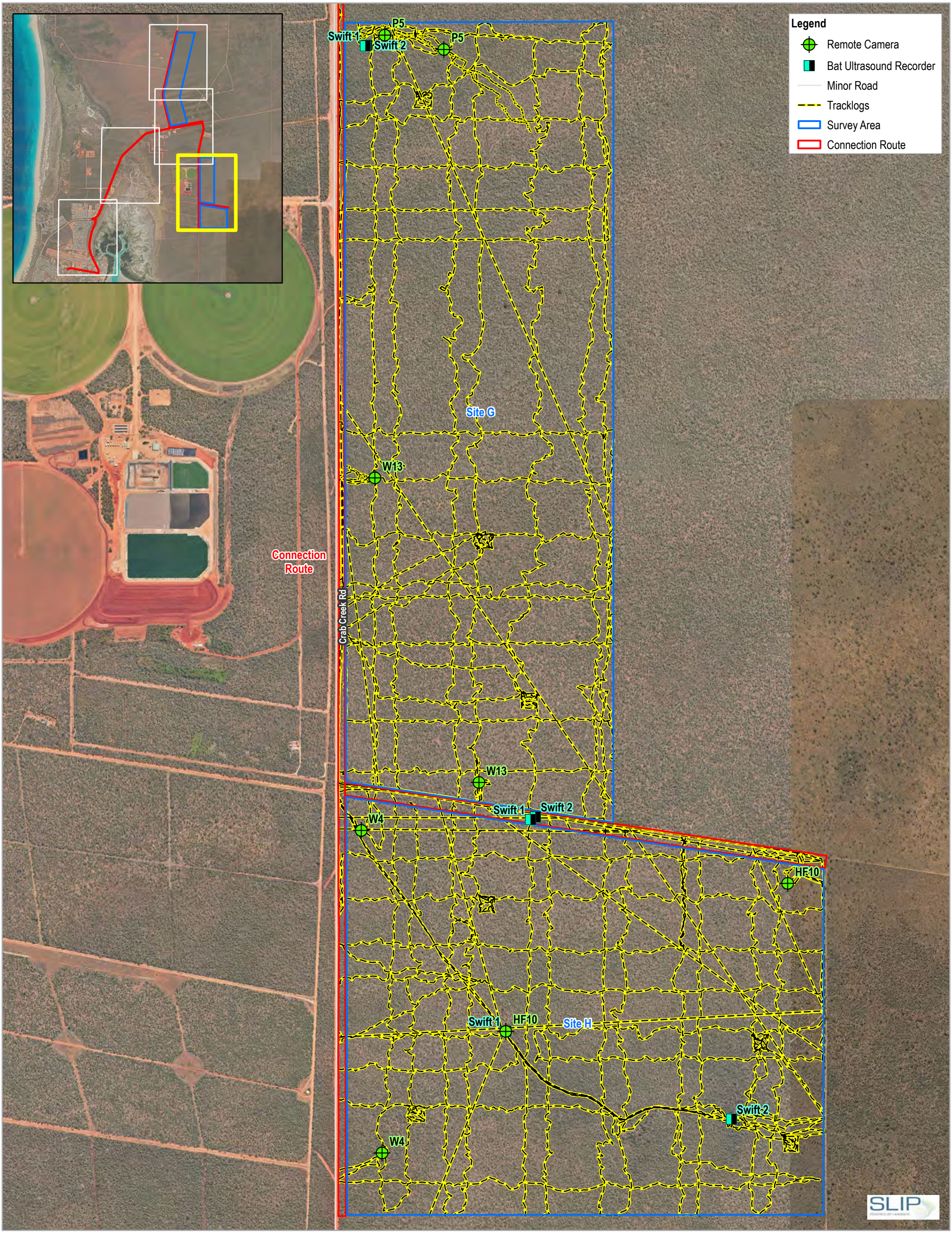
Survey Effort - Broome

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
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Meters

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

N

GHD

Horizon Power
Kimberley Biological Survey

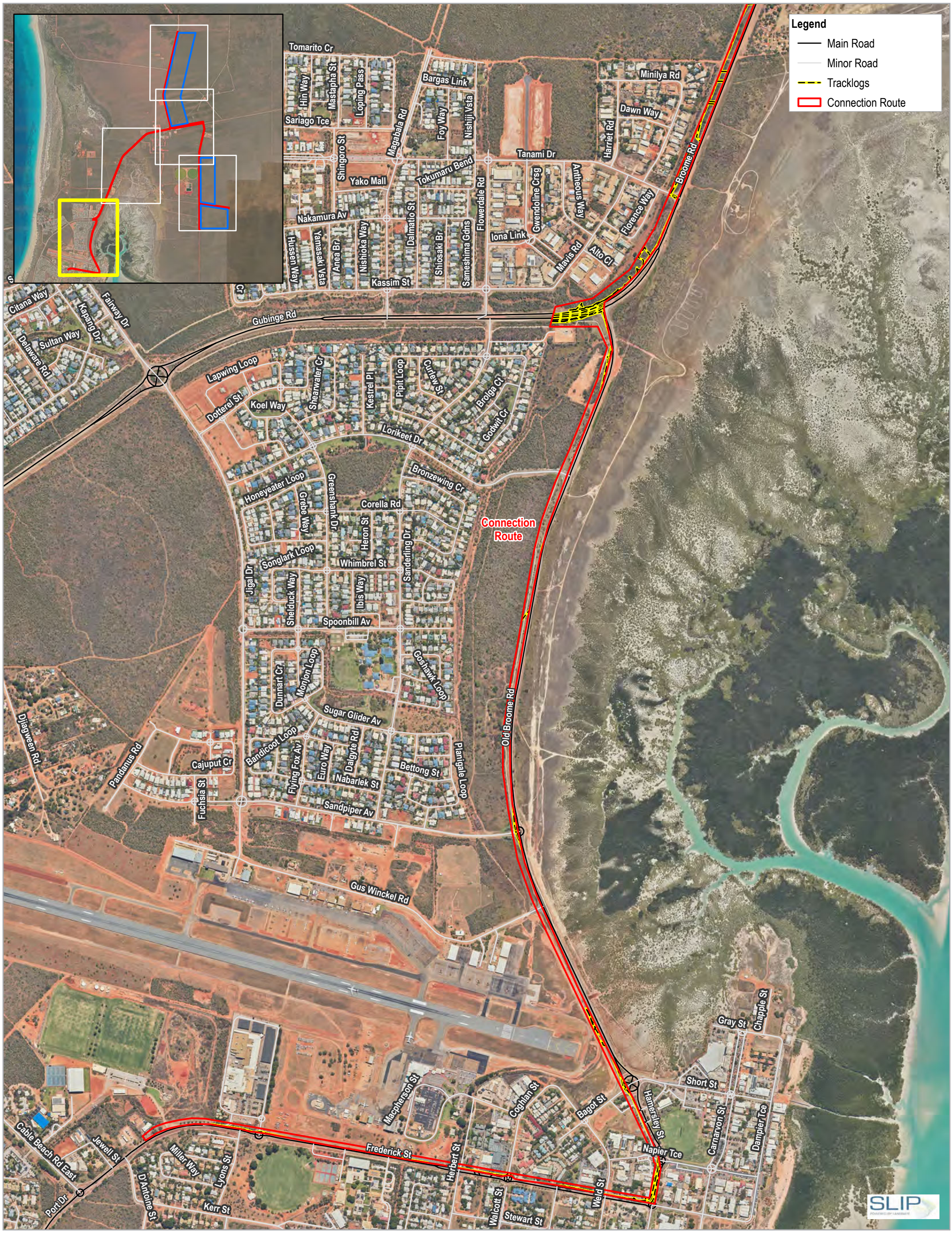
Survey Effort - Broome

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

FIGURE 15

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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

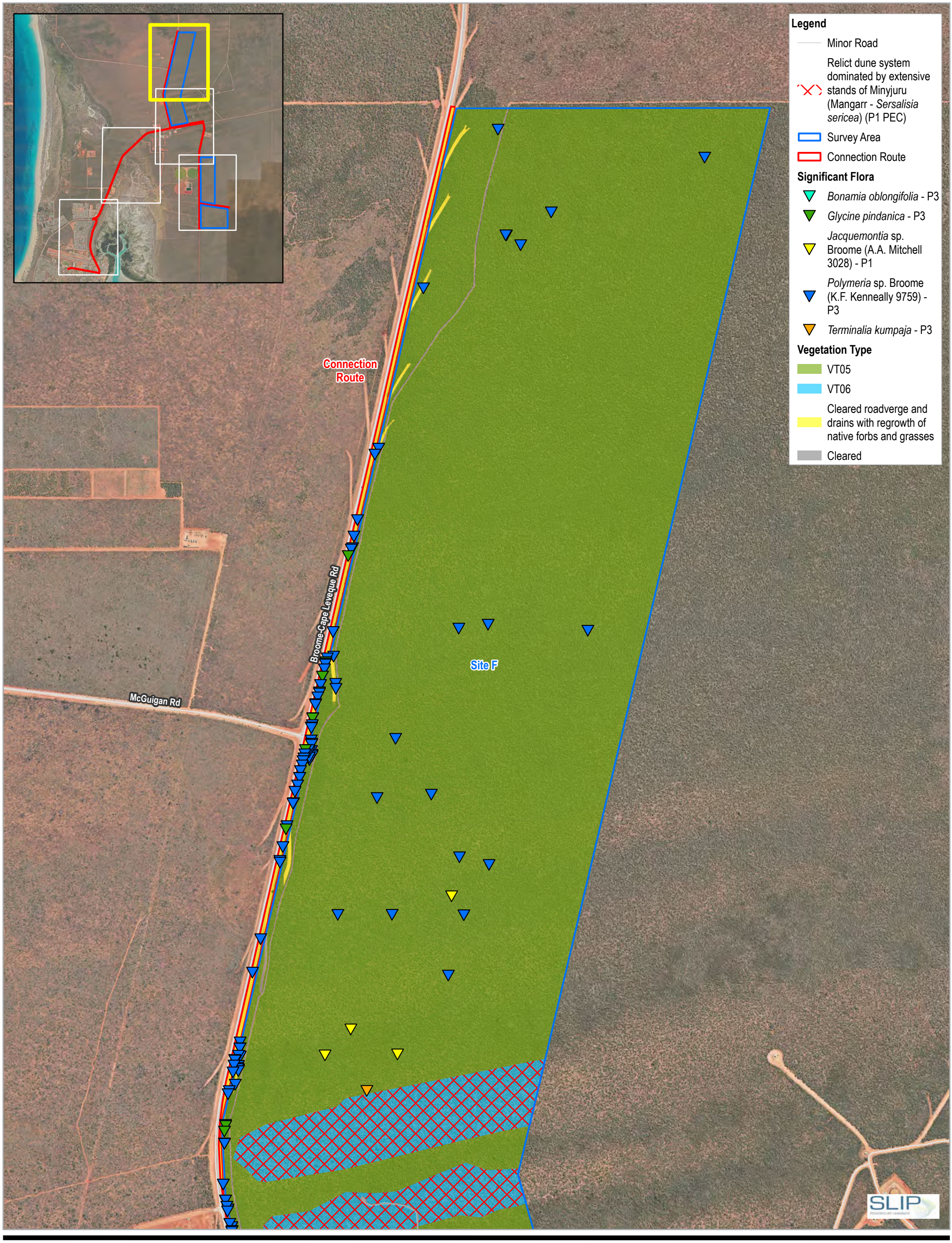
Survey Effort - Broome

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
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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 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 - 15:43

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

Broome-Cape Leveque Rd

Broome Rd

Connection Route

Warrgamburu Dr

Katsuyama Rd

Crab Creek Rd

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

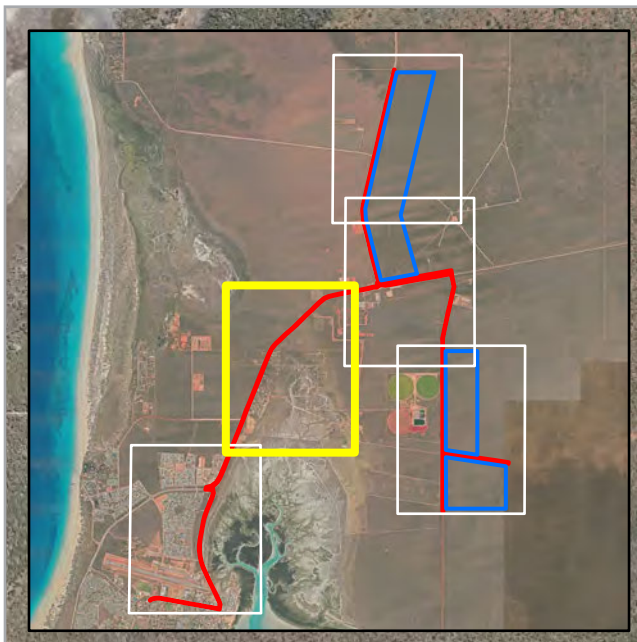
Vegetation Types and Significant Flora and Communities - Broome

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 - 15:47

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



Legend

- Main Road
- Minor Road
- Connection Route

Significant Flora

- *Corymbia paractia* - P2
- *Jacquemontia* sp. Broome (A.A. Mitchell 3028) - P1
- *Polymeria* sp. Broome (K.F. Kenneally 9759) - P3

Vegetation Type

- VT05
- VT07
- Cleared roadverge and drains with regrowth of native forbs and grasses
- 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

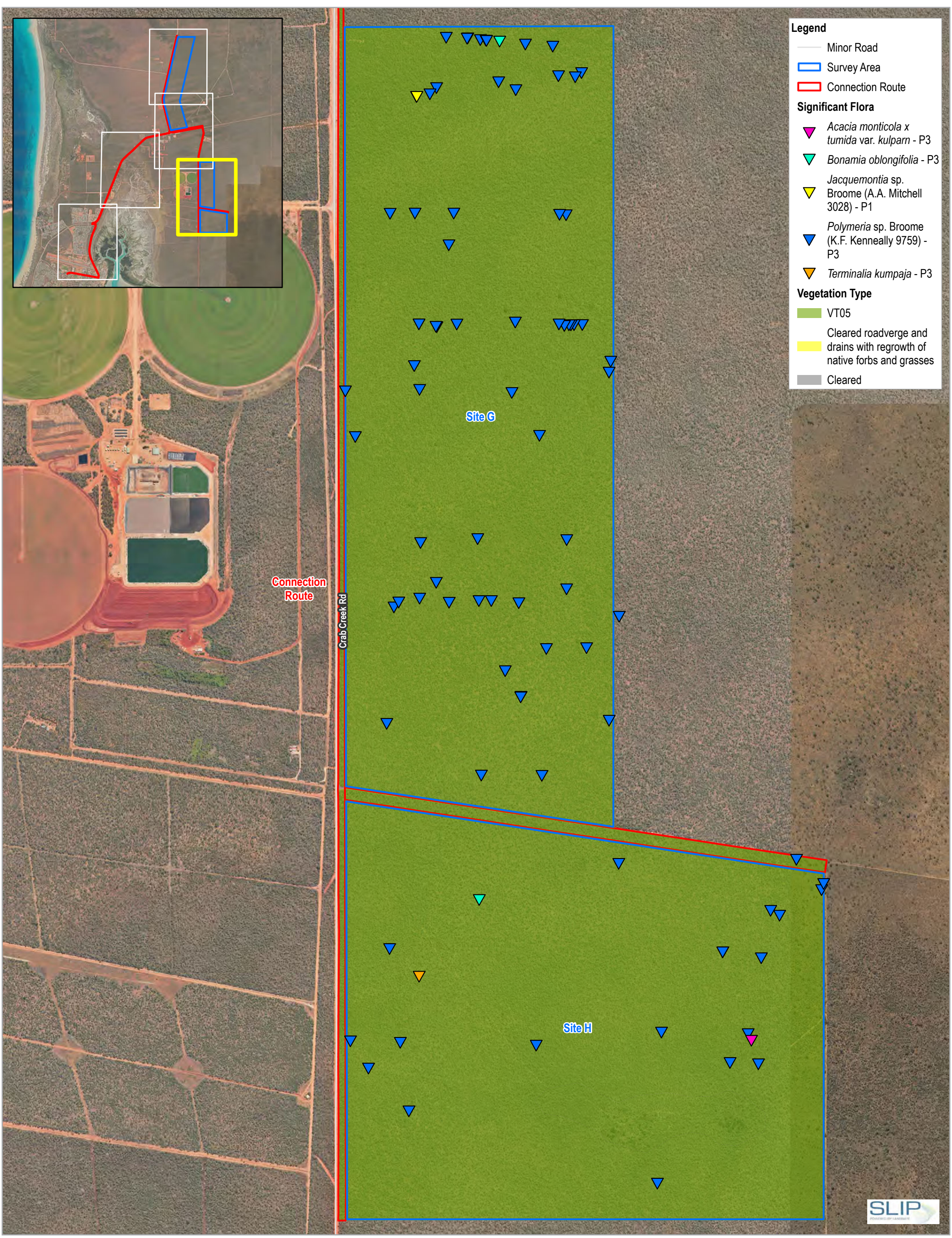
Horizon Power
Kimberley Biological Survey

Vegetation Types and Significant Flora and Communities - Broome

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

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Paper Size ISO A3
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Meters

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

N

GHD

Horizon Power
Kimberley Biological Survey

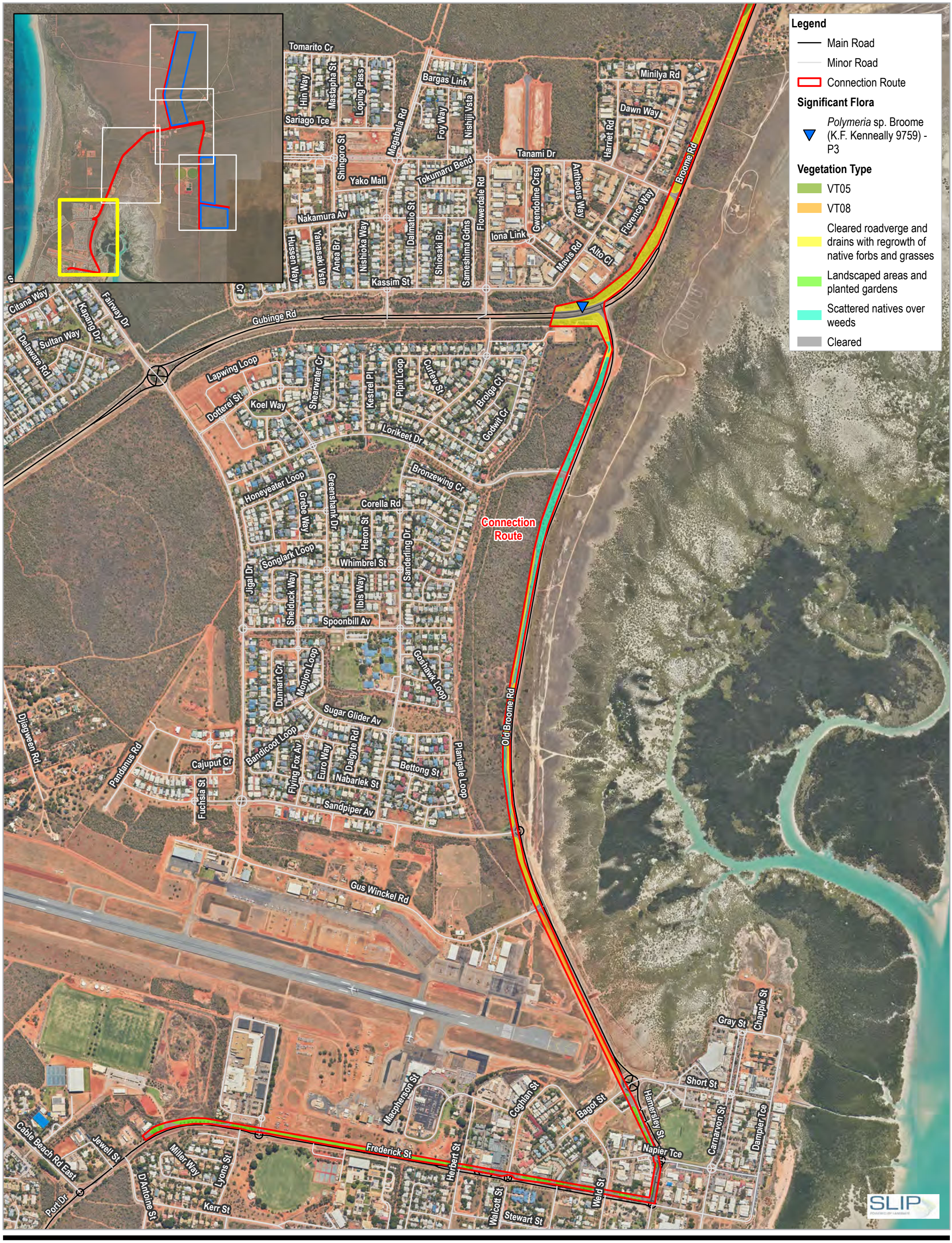
Vegetation Types and Significant Flora and Communities - Broome

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
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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

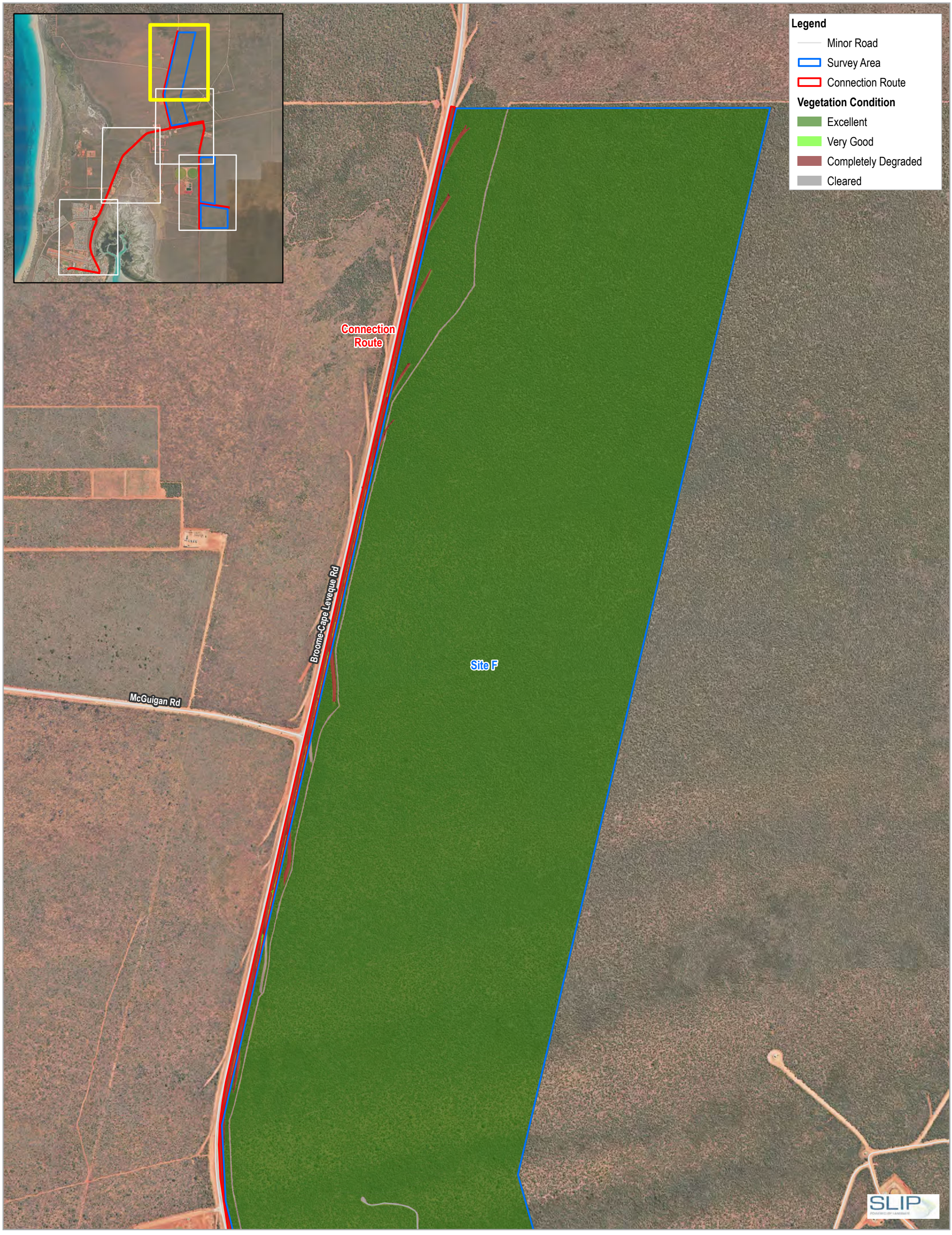
Vegetation Types and Significant Flora and Communities - Broome

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

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Meters

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

N

GHD

Horizon Power
Kimberley Biological Survey

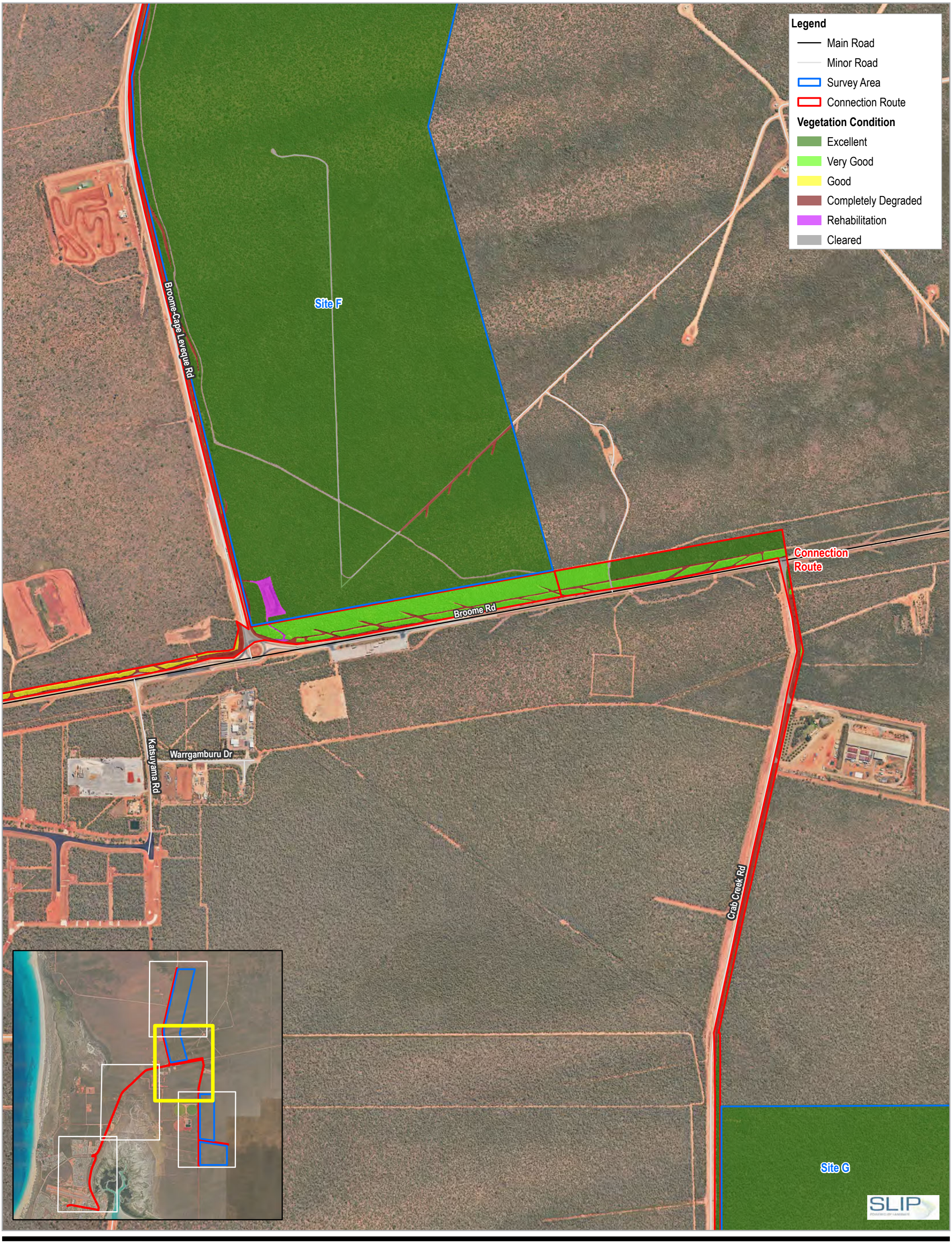
Vegetation Condition - Broome

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

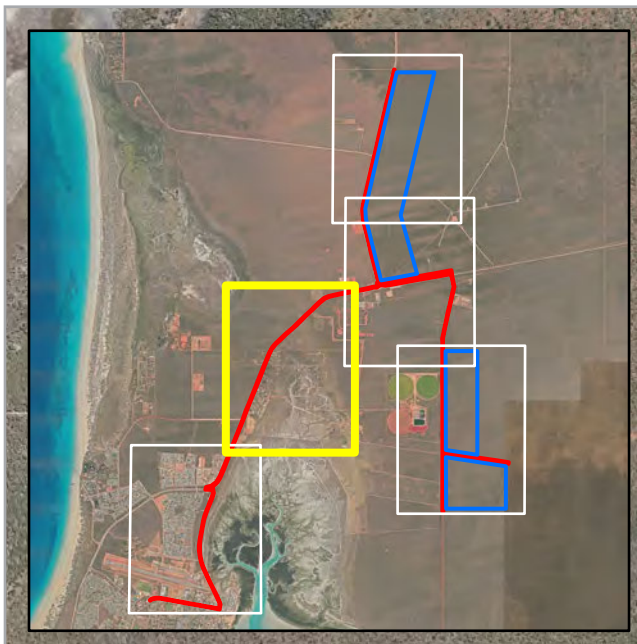
Vegetation Condition - Broome

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

FIGURE 17

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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

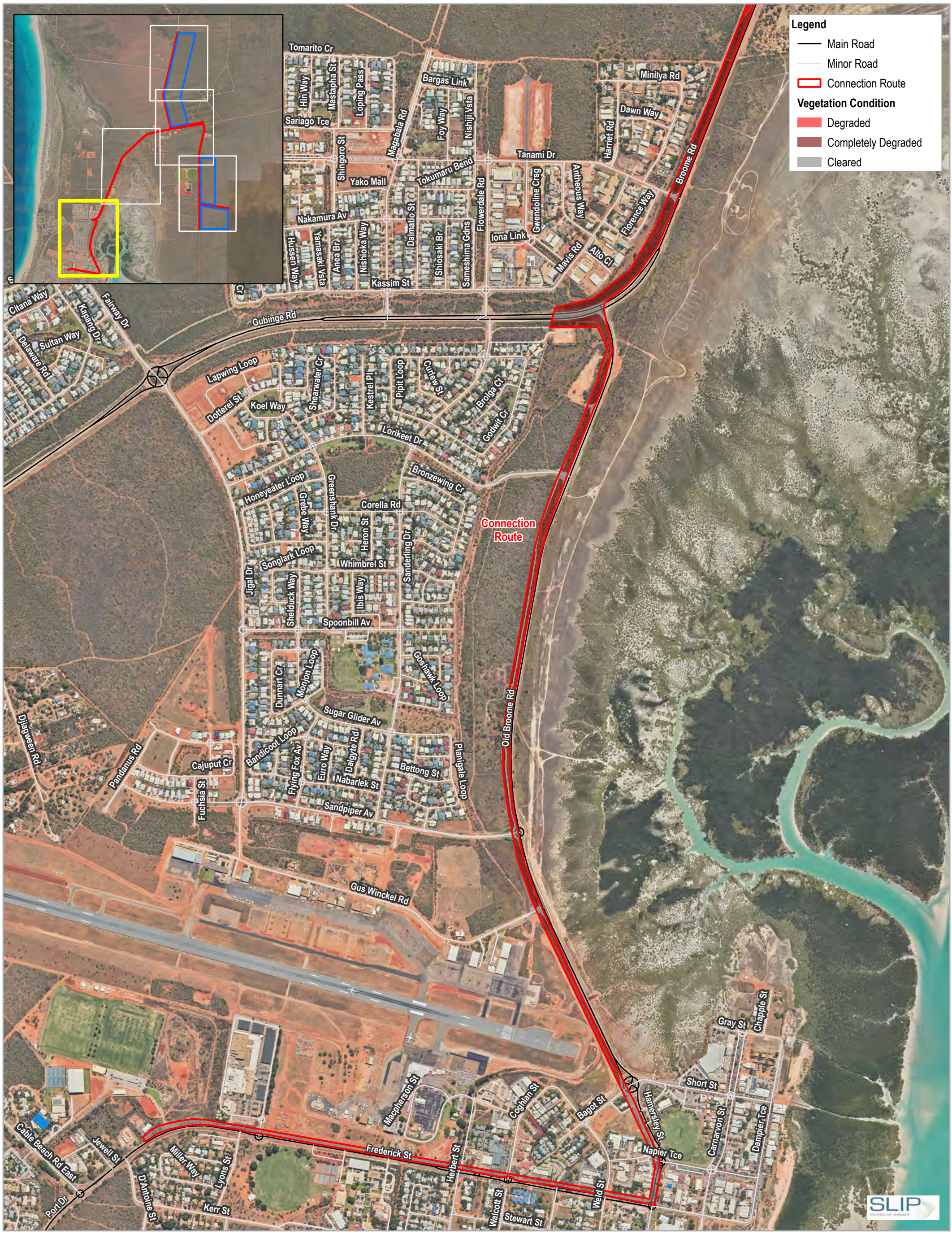
Vegetation Condition - Broome

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
Print date: 10 Jul 2024 - 16:01

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

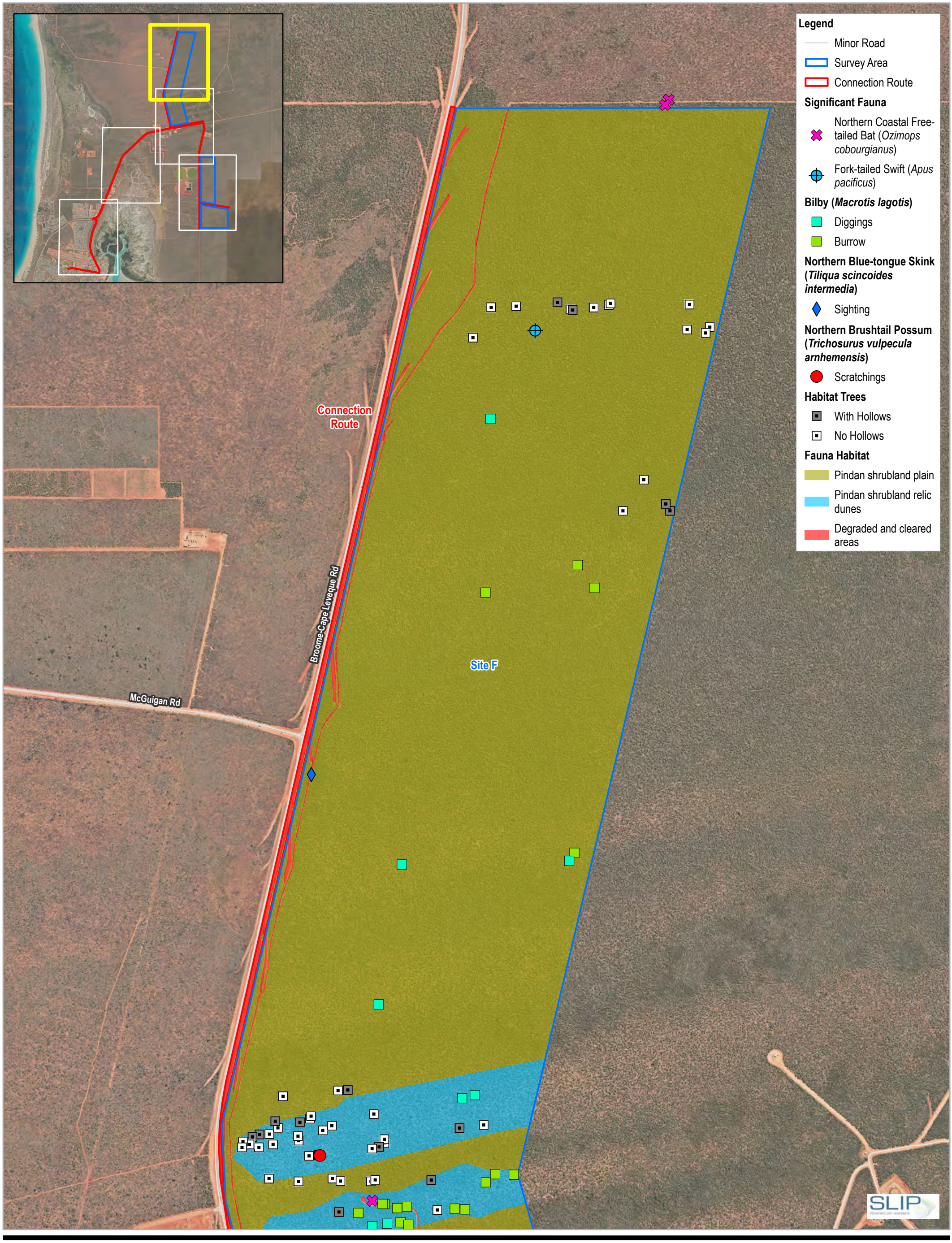
Vegetation Condition - Broome

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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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

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

Legend

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

Significant Fauna

- Northern Coastal Free-tailed Bat (*Ozimops cobourgianus*)
- Bare-rumped Sheath-tailed Bat (*Saccolaimus saccolaimus*) – VU
- Yellow-lipped Cave Bat (*Vespadelus douglasorum*) – P2

Bilby (*Macrotis lagotis*)

- Diggings
- Prints
- Scat
- Burrow
- Camera

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

- Camera
- Prints
- Sighting

Northern Brushtail Possum (*Trichosurus vulpecula arnhemensis*)

- Camera
- Scratchings

Habitat Trees

- With Hollows
- No Hollows

Fauna Habitat

- Pindan shrubland plain
- Pindan shrubland relic dunes
- Scattered plantings and native trees
- Degraded and cleared areas

Site F

Broome-Cape Leveque Rd

Broome Rd

Connection Route

Warrgamburu Dr

Katsuyama Rd

Crab Creek Rd

Site G

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

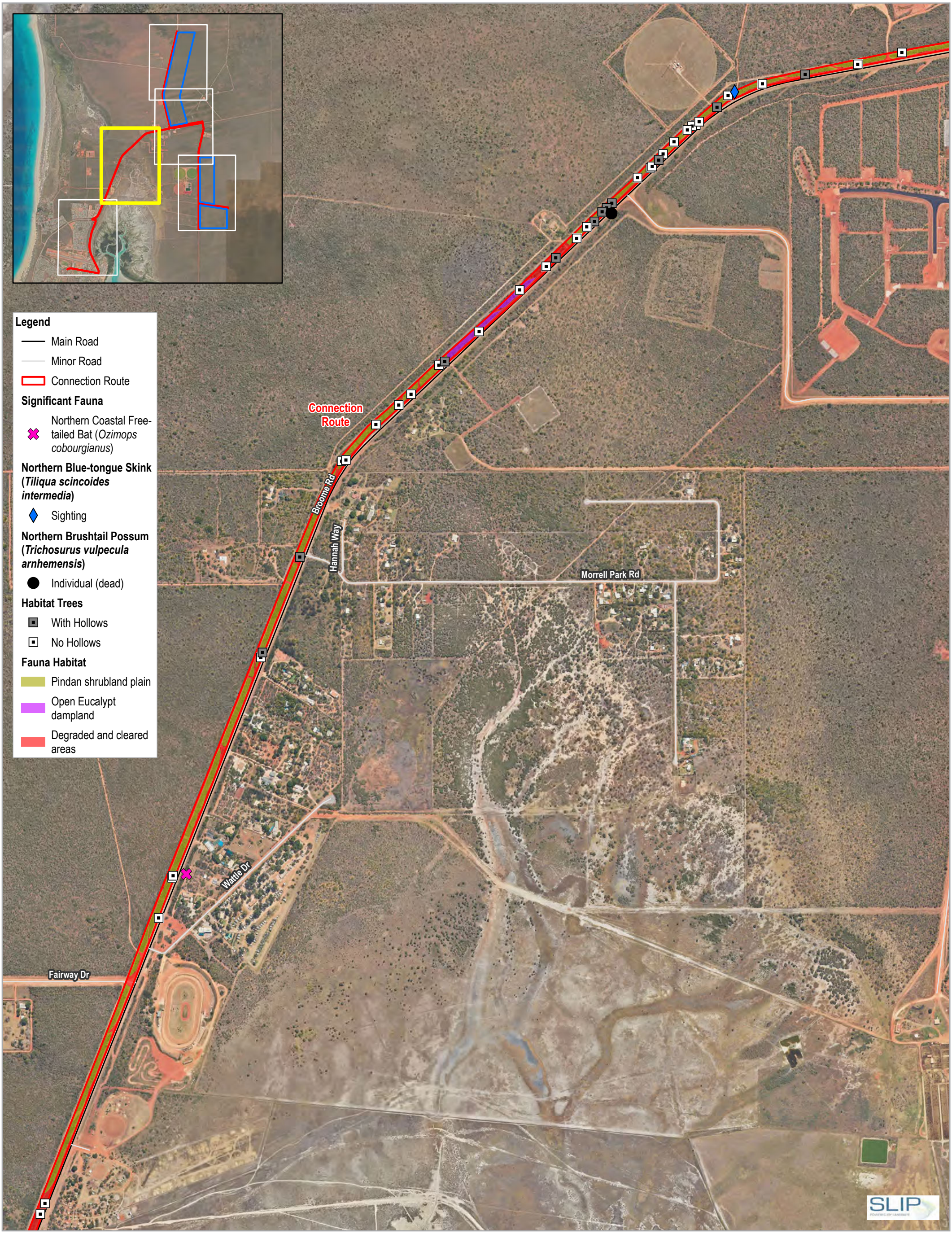
Fauna Habitat and Significant Fauna - Broome

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
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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

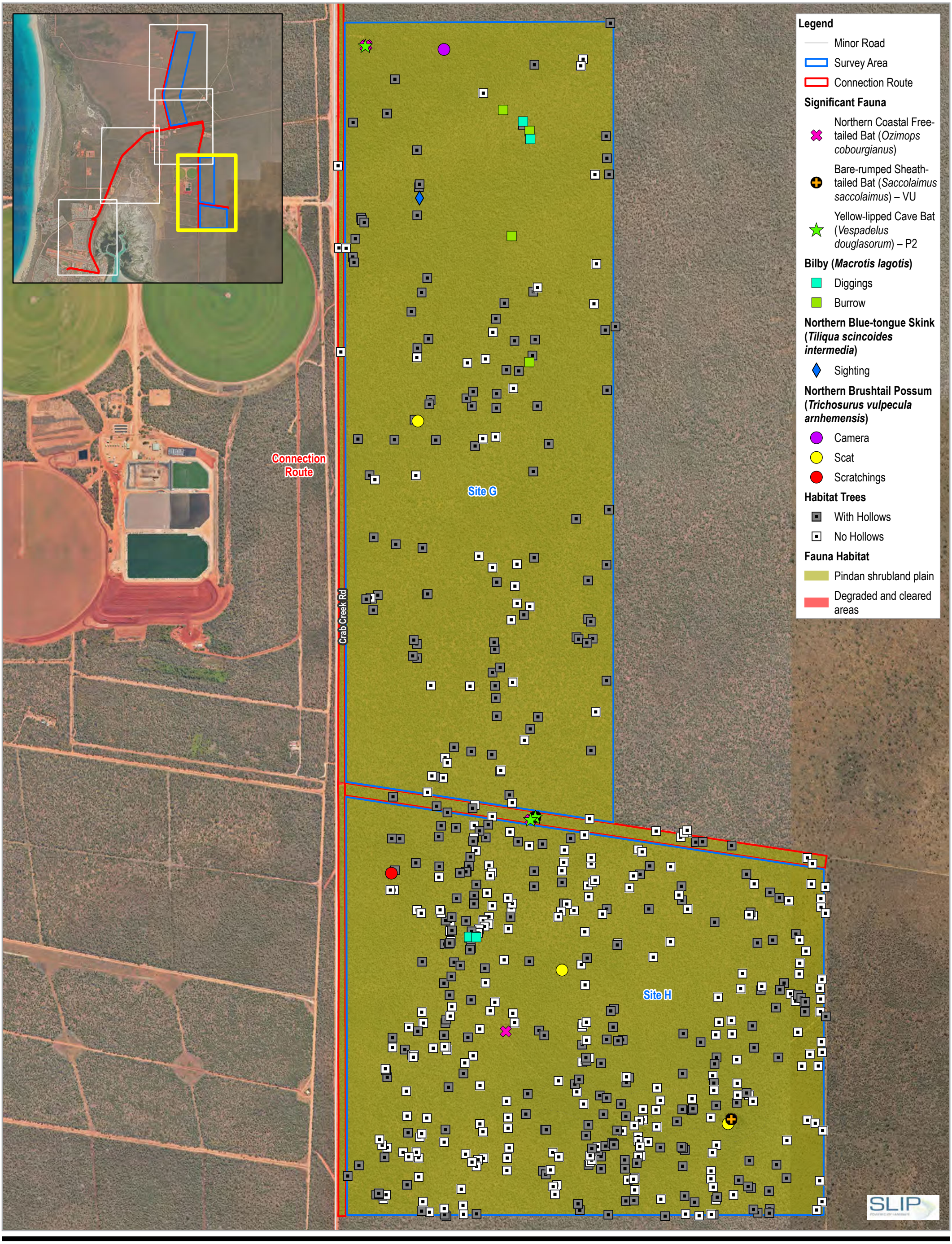
Fauna Habitat and Significant Fauna - Broome

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
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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

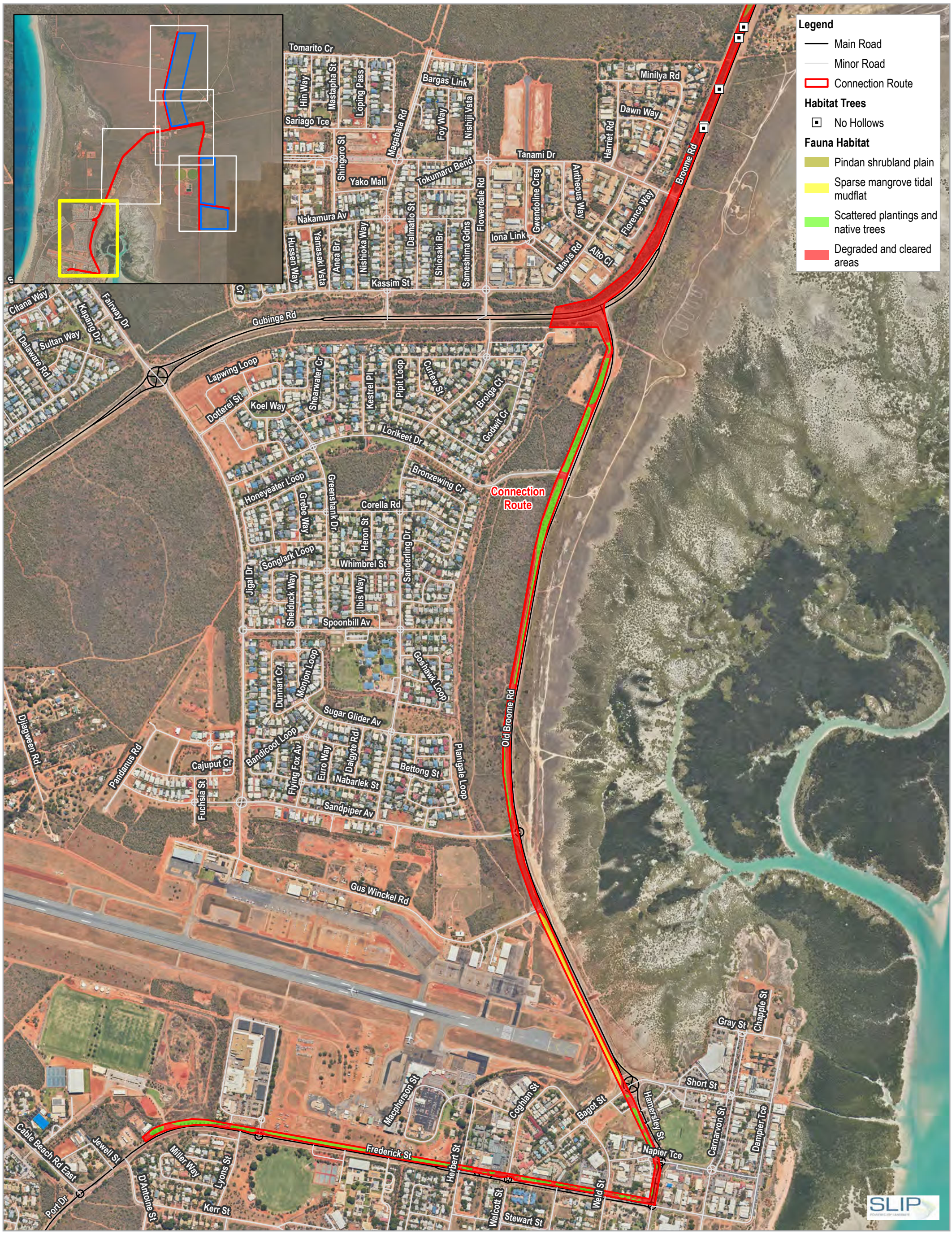
Fauna Habitat and Significant Fauna - Broome

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
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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

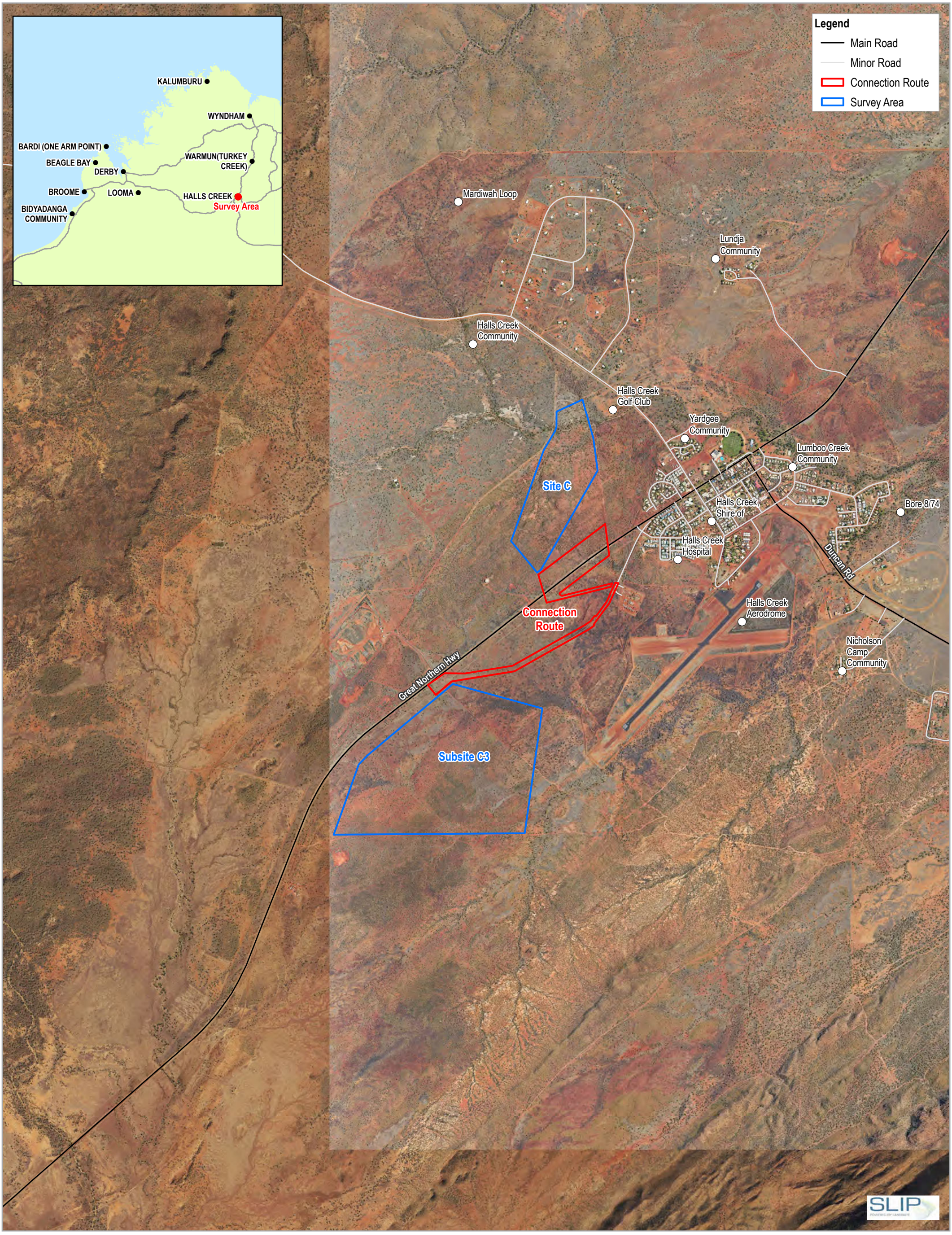
Fauna Habitat and Significant Fauna - Broome

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

Legend

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

Hydrography

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

Threatened and Priority Flora - Conservation Status

- Priority 1
- Priority 2
- Priority 3

Fauna Conservation Categories

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

Threatened and Priority Ecological Communities

- Priority 3

Margaret River
Panton River
Prospect Creek
Site C
Great Northern Hwy
Connection Route
Subsite C3
Great Northern Hwy
Elvire River
Duncan Rd
Laura River
Tanami Rd
Black Elvire River
SLIP

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

0 1.5 3 4.5 6
Kilometers

N

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

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

Legend
- Remote Camera
- Bat Ultrasound Recorder
- Habitat Assessment
- Quadrat
- Releve
- Main Road
- Minor Road
- Tracklogs
- Connection Route
- Survey Area

Mount Amhurst Rd
Roberta Av
Smith St
Moyle Cr
John Flynn St
Bridge St
Great Northern Hwy
HC 08
Cam 115
SM4-6
HC 09
Cam 24
Site C
Cam 29
HC 10
Cam 166
HC 07
Cam 6
Connection Route
HC 01
Cam 1
HC 03
SM4-7
Cam B14
HC 04
Subsite C3
HC R11
HC 06
HC 05
Cam 13
HC 02
Cam 4
Cam 77

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

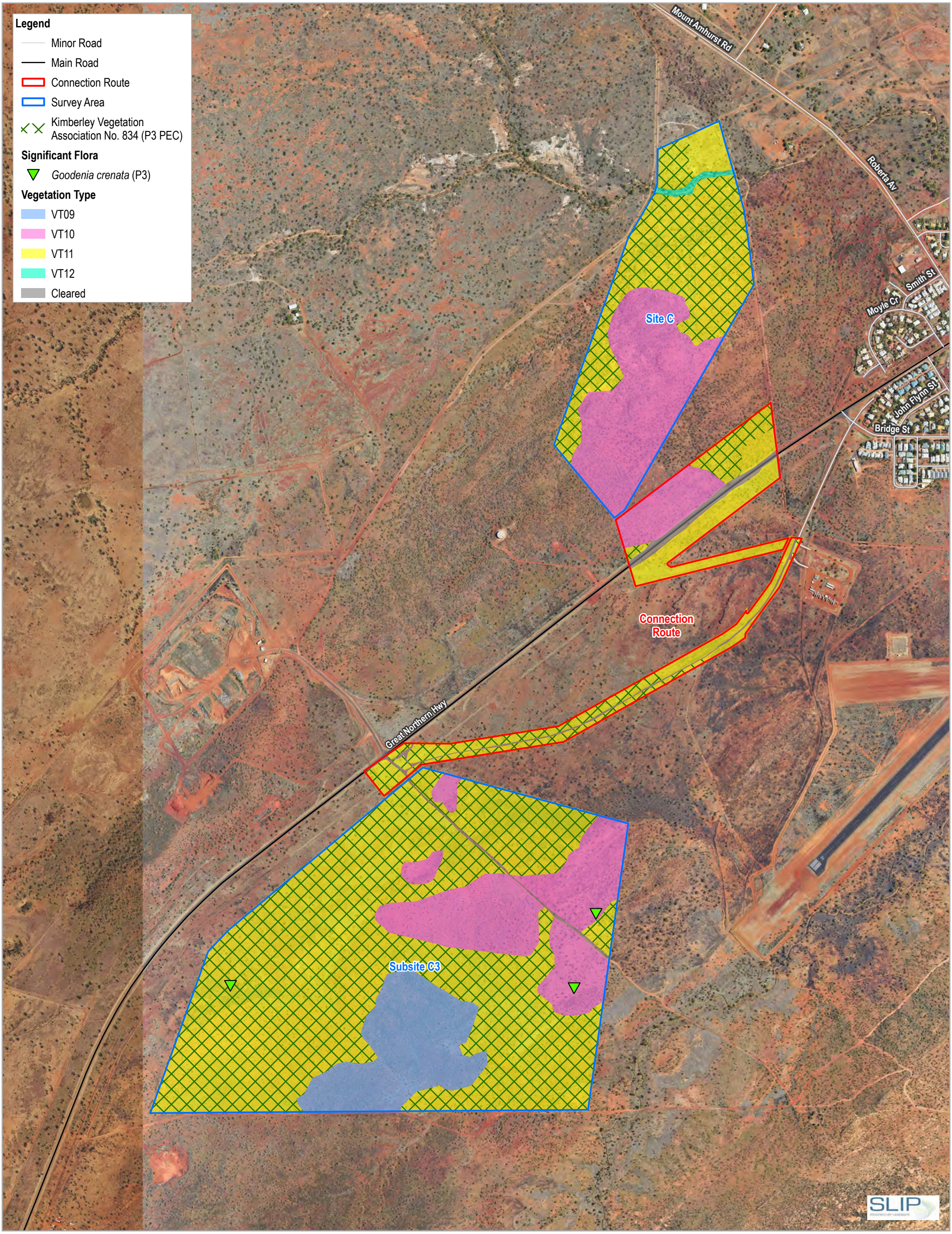
Survey Effort – Halls Creek

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

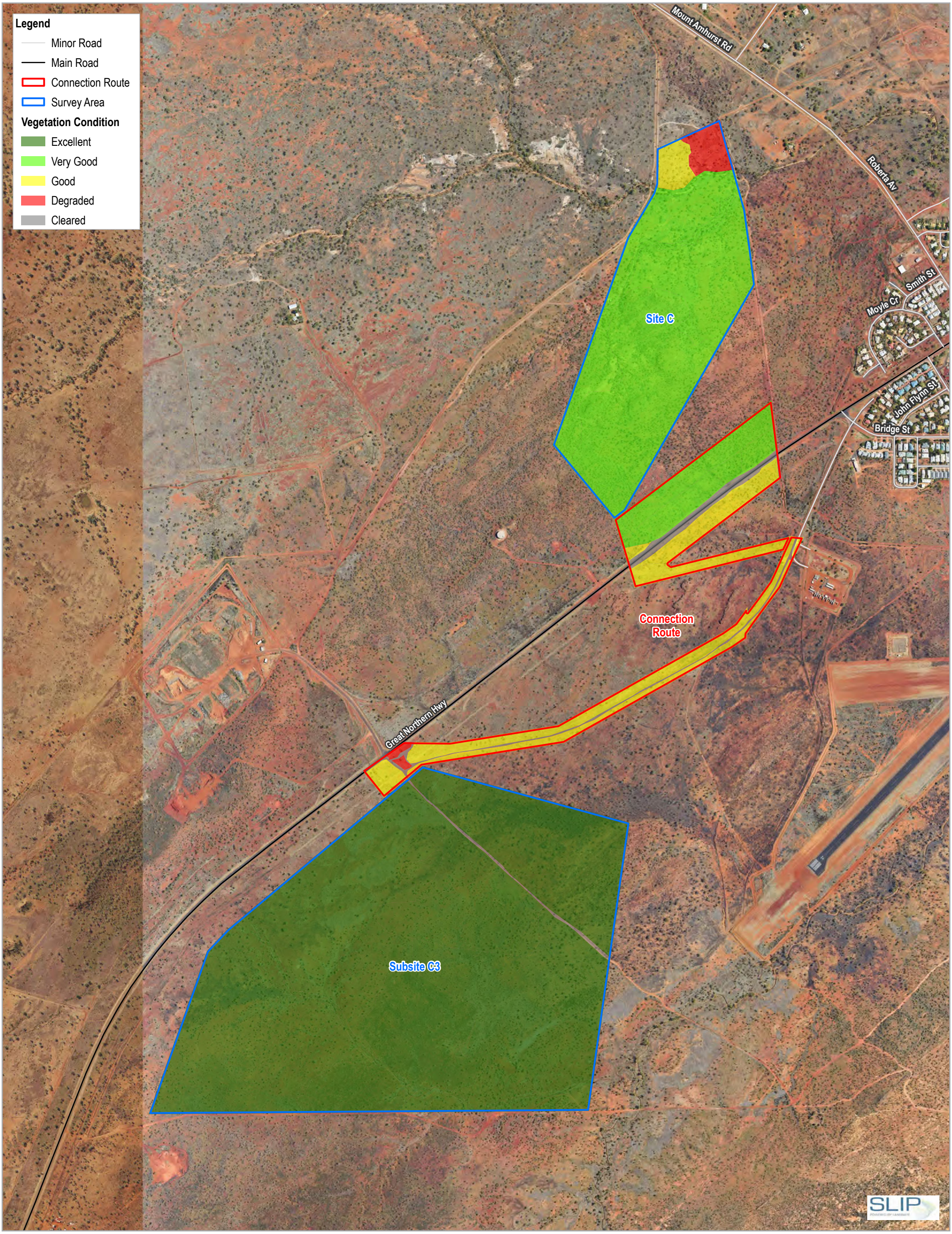
Vegetation Types and Significant Flora and Communities – Halls Creek

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

GHD

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: – is not critically endangered; and – 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: – is not critically endangered or endangered; and – 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 – – there is no reasonable doubt that the last occurrence of the ecological community has collapsed); or – the ecological community has been so extensively modified throughout its range that no occurrence of it is likely to recover – • its species composition or structure; or • its species composition and structure. 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. 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. 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. – 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: – 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; – 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. 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. – 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. – Ecological communities that have been removed from the list of threatened communities during the past five years.
Priority 5	Conservation Dependent ecological communities. 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". 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". 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". 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). 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 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 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 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 – 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. – 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. – 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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TAXON	CLASS	CONS
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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TAXON	CLASS	CONS
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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TAXON	CLASS	CONS
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 Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely 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
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Malurus coronatus coronatus Purple-crowned Fairy-wren (western) [64442]	Endangered	Species or species habitat may occur within area	In buffer area only
Pezoporus occidentalis 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 Princess Parrot, Alexandra's Parrot [758]	Vulnerable	Species or species habitat may occur within area	In feature area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area	In buffer area only
MAMMAL			
Macroderma gigas Ghost Bat [174]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Macrotis lagotis Greater Bilby [282]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Petrogale lateralis kimberleyensis Wiliji, West Kimberley Rock-wallaby [90832]	Endangered	Species or species habitat known to occur within area	In feature area
Trichosurus vulpecula arnhemensis Northern Brushtail Possum [83091]	Vulnerable	Species or species habitat may occur within area	In feature area
REPTILE			
Liopholis kintorei 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 Northern Blue-tongued Skink [89838]	Critically Endangered	Species or species habitat likely 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
Varanus mitchelli 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 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 Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Migratory Marine Species			
Crocodylus porosus Salt-water Crocodile, Estuarine Crocodile [1774]		Species or species habitat likely to occur within area	In feature area
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
Migratory Terrestrial Species			
Cecropis daurica Red-rumped Swallow [80610]		Species or species habitat may occur within area	In feature area
Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat may occur within area	In feature area
Hirundo rustica Barn Swallow [662]		Species or species habitat may occur within area	In feature area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos 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 Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Species or species habitat may occur within area	In feature area
Glareola maldivarum Oriental Pratincole [840]		Species or species habitat may occur within area	In feature area
Pandion haliaetus Osprey [952]		Species or species habitat likely 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 buffer area only
Tringa stagnatilis 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 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](#) Magpie Goose [978]		Species or species habitat may occur within area overfly marine area	In feature area
[Apus pacificus](#) Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
[Bubulcus ibis as Ardea ibis](#) Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
[Calidris acuminata](#) Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat likely to occur within area	In feature area
[Calidris ferruginea](#) Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
[Calidris melanotos](#) Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
[Cecropis daurica as Hirundo daurica](#) Red-rumped Swallow [80610]		Species or species habitat may occur within area overfly marine area	In feature area
[Chalcites osculans as Chrysococcyx osculans](#) Black-eared Cuckoo [83425]		Species or species habitat known to occur within area overfly marine area	In feature area
[Charadrius veredus](#) 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](#) Oriental Pratincole [840]		Species or species habitat may occur within area overfly marine area	In feature area
[Haliaeetus leucogaster](#) White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
[Hirundo rustica](#) Barn Swallow [662]		Species or species habitat may occur within area overfly marine area	In feature area
[Merops ornatus](#) Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
[Motacilla cinerea](#) Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area	In feature area
[Motacilla flava](#) Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area	In feature area
[Pandion haliaetus](#) Osprey [952]		Species or species habitat likely to occur within area	In buffer area only
[Rostratula australis as Rostratula benghalensis (sensu lato)](#) Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
[Tringa nebularia](#) Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area overfly marine area	In buffer area only
[Tringa stagnatilis](#) 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 Freshwater Crocodile, Johnston's Crocodile, Johnstone's Crocodile [1773]		Species or species habitat may occur within area	In feature area
Crocodylus porosus 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 Freshwater Sawfish [60756]	Foraging	Known to occur	In buffer area only
Pristis pristis 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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Department of Climate Change, Energy, the Environment and Water
GPO Box 3090
Canberra ACT 2601 Australia
+61 2 6274 1111

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 Grey Falcon [929]	Vulnerable	Species or species habitat known to occur within area	In feature area
Limnodromus semipalmatus Asian Dowitcher [843]	Vulnerable	Species or species habitat known to occur within area	In feature area
Limosa lapponica menzbieri Northern Siberian Bar-tailed Godwit, Russkoye Bar-tailed Godwit [86432]	Endangered	Species or species habitat known to occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Papasula abbotti Abbott's Booby [59297]	Endangered	Species or species habitat may occur within area	In buffer area only
Pezoporus occidentalis Night Parrot [59350]	Endangered	Species or species habitat may occur within area	In feature area
Phaethon rubricauda westralis 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 Princess Parrot, Alexandra's Parrot [758]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area	In feature area
Tyto novaehollandiae kimberli 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 Southern Bluefin Tuna [69402]	Conservation Dependent	Species or species habitat likely to occur within area	In buffer area only
MAMMAL			
Dasyurus hallucatus 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 Ghost Bat [174]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Macrotis lagotis Greater Bilby [282]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Saccolaimus saccolaimus nudicluniatus 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 Northern Brushtail Possum [83091]	Vulnerable	Species or species habitat may 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
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	Breeding likely to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Breeding known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	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
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
Varanus mitchelli Mitchell's Water Monitor [1569]	Critically 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
Glyphis garricki Northern River Shark, New Guinea River Shark [82454]	Endangered	Breeding likely to occur within area	In buffer area only
Pristis clavata Dwarf Sawfish, Queensland Sawfish [68447]	Vulnerable	Breeding 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 likely 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

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 Oceanic Whitetip Shark [84108]		Species or species habitat may occur within area	In buffer area only
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Breeding known to occur within area	In buffer area only
Crocodylus porosus Salt-water Crocodile, Estuarine Crocodile [1774]		Species or species habitat likely to occur within area	In feature area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area	In buffer area only
Dugong dugon Dugong [28]		Species or species habitat 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
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat known to occur within area	In buffer area only
Mobula alfredi as Manta alfredi Reef Manta Ray, Coastal Manta Ray [90033]		Species or species habitat may occur within area	In buffer area only
Mobula birostris as Manta birostris Giant Manta Ray [90034]		Species or species habitat may occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Breeding known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Orcaella heinsohni Australian Snubfin Dolphin [81322]		Breeding known to occur within area	In buffer area only
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In buffer area only
Pristis clavata Dwarf Sawfish, Queensland Sawfish [68447]	Vulnerable	Breeding 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 likely 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
Sousa sahulensis as Sousa chinensis Australian Humpback Dolphin [87942]		Breeding known to occur within area	In buffer area only
Tursiops aduncus (Arafura/Timor Sea populations) 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 Red-rumped Swallow [80610]		Species or species habitat may occur within area	In feature area
Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat known to occur within area	In feature area
Hirundo rustica Barn Swallow [662]		Species or species habitat known to occur within area	In feature area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Motacilla flava](#) Yellow Wagtail [644]		Species or species habitat known to occur within area	In feature area
Migratory Wetlands Species			
[Actitis hypoleucos](#) Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
[Calidris acuminata](#) Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area	In feature area
[Calidris canutus](#) Red Knot, Knot [855]	Vulnerable	Species or species habitat 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
[Calidris melanotos](#) Pectoral Sandpiper [858]		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
[Charadrius veredus](#) Oriental Plover, Oriental Dotterel [882]		Species or species habitat may occur within area	In feature area
[Glareola maldivarum](#) Oriental Pratincole [840]		Species or species habitat may occur within area	In feature area
[Limnodromus semipalmatus](#) Asian Dowitcher [843]	Vulnerable	Species or species habitat known to occur within area	In feature area
[Limosa lapponica](#) 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 Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Anous stolidus Common Noddy [825]		Species or species habitat may occur within area	In buffer area only
Anous tenuirostris melanops Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Anseranas semipalmata 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](#) Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
[Bubulcus ibis as Ardea ibis](#) Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
[Calidris acuminata](#) Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area	In feature area
[Calidris canutus](#) Red Knot, Knot [855]	Vulnerable	Species or species habitat may occur within area overfly marine area	In feature area
[Calidris ferruginea](#) Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
[Calidris melanotos](#) Pectoral Sandpiper [858]		Species or species habitat known to occur within area overfly marine area	In feature area
[Calonectris leucomelas](#) Streaked Shearwater [1077]		Species or species habitat may occur within area	In buffer area only
[Cecropis daurica as Hirundo daurica](#) Red-rumped Swallow [80610]		Species or species habitat may occur within area overfly marine area	In feature area
[Chalcites osculans as Chrysococcyx osculans](#) Black-eared Cuckoo [83425]		Species or species habitat known to occur within area overfly marine 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

Scientific Name	Threatened Category	Presence Text	Buffer Status
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Species or species habitat may occur within area overfly marine area	In feature area
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
Glareola maldivarum Oriental Pratincole [840]		Species or species habitat may occur within area overfly marine area	In feature area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
Hirundo rustica Barn Swallow [662]		Species or species habitat known to occur within area overfly marine area	In feature area
Limnodromus semipalmatus Asian Dowitcher [843]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In feature area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Motacilla flava](#) Yellow Wagtail [644]		Species or species habitat known to occur within area overfly marine area	In feature area
[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
[Papasula abbotti](#) Abbott's Booby [59297]	Endangered	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
[Rostratula australis as Rostratula benghalensis (sensu lato)](#) 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](#) Little Tern [82849]		Species or species habitat may occur within area	In buffer area only
[Tringa nebularia](#) Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Fish			
[Campichthys tricarinatus](#) Three-keel Pipefish [66192]		Species or species habitat may occur within area	In buffer area only
[Choeroichthys brachysoma](#) 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 Pig-snouted Pipefish [66198]		Species or species habitat may occur within area	In buffer area only
Corythoichthys flavofasciatus Reticulate Pipefish, Yellow-banded Pipefish, Network Pipefish [66200]		Species or species habitat may occur within area	In buffer area only
Doryrhamphus excisus 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 Cleaner Pipefish, Janss' Pipefish [66212]		Species or species habitat may occur within area	In buffer area only
Halicampus brocki Brock's Pipefish [66219]		Species or species habitat may occur within area	In buffer area only
Halicampus grayi Mud Pipefish, Gray's Pipefish [66221]		Species or species habitat may occur within area	In buffer area only
Halicampus nitidus Glittering Pipefish [66224]		Species or species habitat may occur within area	In buffer area only
Halicampus spinirostris Spiny-snout Pipefish [66225]		Species or species habitat may occur within area	In buffer area only
Haliichthys taeniophorus Ribboned Pipehorse, Ribboned Seadragon [66226]		Species or species habitat may occur within area	In buffer area only
Hippichthys penicillus Beady Pipefish, Steep-nosed Pipefish [66231]		Species or species habitat may occur within area	In buffer area only
Hippocampus histrix 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 Spotted Seahorse, Yellow Seahorse [66237]		Species or species habitat may occur within area	In buffer area only
Hippocampus planifrons Flat-face Seahorse [66238]		Species or species habitat may occur within area	In buffer area only
Hippocampus spinosissimus Hedgehog Seahorse [66239]		Species or species habitat may occur within area	In buffer area only
Micrognathus micronotopterus Tidepool Pipefish [66255]		Species or species habitat may occur within area	In buffer area only
Solegnathus hardwickii Pallid Pipehorse, Hardwick's Pipehorse [66272]		Species or species habitat may occur within area	In buffer area only
Solegnathus lettiensis Gunther's Pipehorse, Indonesian Pipefish [66273]		Species or species habitat may occur within area	In buffer area only
Solenostomus cyanopterus Robust Ghostpipefish, Blue-finned Ghost Pipefish, [66183]		Species or species habitat may occur within area	In buffer area only
Syngnathoides biaculeatus Double-end Pipehorse, Double-ended Pipehorse, Alligator Pipefish [66279]		Species or species habitat may occur within area	In buffer area only
Trachyrhamphus bicoarctatus Bentstick Pipefish, Bend Stick Pipefish, Short-tailed Pipefish [66280]		Species or species habitat may occur within area	In buffer area only
Trachyrhamphus longirostris Straightstick Pipefish, Long-nosed Pipefish, Straight Stick Pipefish [66281]		Species or species habitat may occur within area	In buffer area only
Mammal			
Dugong dugon 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 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 Dubois' Sea Snake, Dubois' Seasnake, Reef Shallows Sea Snake [1116]		Species or species habitat may 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
Aipysurus laevis 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 Mosaic Sea Snake [87261]		Species or species habitat may occur within area	In buffer area only
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Breeding known to occur within area	In buffer area only
Crocodylus johnstoni Freshwater Crocodile, Johnston's Crocodile, Johnstone's Crocodile [1773]		Species or species habitat may occur within area	In feature area
Crocodylus porosus Salt-water Crocodile, Estuarine Crocodile [1774]		Species or species habitat likely to occur within area	In feature area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area	In buffer area only
Emydocephalus annulatus Eastern Turtle-headed Sea Snake [1125]		Species or species habitat may occur within area	In buffer area only
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Breeding likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Hydrelaps darwiniensis Port Darwin Sea Snake, Black-ringed Mangrove Sea Snake [1100]		Species or species habitat may occur within area	In buffer area only
Hydrophis elegans 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 Spine-bellied Sea Snake [93516]		Species or species habitat may occur within area	In buffer area only
Hydrophis kingii as Disteira kingii Spectacled Sea Snake [93511]		Species or species habitat may occur within area	In buffer area only
Hydrophis macdowelli as Hydrophis mcdowelli 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 Olive-headed Sea Snake [93512]		Species or species habitat may occur within area	In buffer area only
Hydrophis ornatus 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 Horned Sea Snake [93509]		Species or species habitat may occur within area	In buffer area only
Hydrophis platurus as Pelamis platurus Yellow-bellied Sea Snake [93517]		Species or species habitat may occur within area	In buffer area only
Hydrophis stokesii as Astrotia stokesii Stokes' Sea Snake [93510]		Species or species habitat may occur within area	In buffer area only
Natator depressus 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 Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area	In buffer area only
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area	In buffer area only
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat known to occur within area	In buffer area only
Orcaella heinsohni Australian Snubfin Dolphin [81322]		Breeding known to occur within area	In buffer area only
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In buffer area only
Sousa sahulensis Australian Humpback Dolphin [87942]		Breeding known to occur within area	In buffer area only
Stenella attenuata Spotted Dolphin, Pantropical Spotted Dolphin [51]		Species or species habitat may occur within area	In buffer area only
Tursiops aduncus 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) 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. 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 Australian Snubfin Dolphin [81322]	Breeding	Known to occur	In buffer area only
Orcaella heinsohni Australian Snubfin Dolphin [81322]	Calving	Known to occur	In buffer area only
Orcaella heinsohni Australian Snubfin Dolphin [81322]	Foraging (high density prey)	Known to occur	In buffer area only
Sousa chinensis Indo-Pacific Humpback Dolphin [50]	Breeding	Known to occur	In buffer area only
Sousa chinensis Indo-Pacific Humpback Dolphin [50]	Calving	Known to occur	In buffer area only
Sousa chinensis Indo-Pacific Humpback Dolphin [50]	Foraging (high density prey)	Known to occur	In buffer area only
Tursiops aduncus Indo-Pacific/Spotted Bottlenose Dolphin [68418]	Breeding	Known to occur	In buffer area only
Tursiops aduncus Indo-Pacific/Spotted Bottlenose Dolphin [68418]	Calving	Known to occur	In buffer area only

Scientific Name	Behaviour	Presence	Buffer Status
Tursiops aduncus Indo-Pacific/Spotted Bottlenose Dolphin [68418]	Foraging	Known to occur	In buffer area only
River shark			
Pristis clavata Dwarf Sawfish [68447]	Juvenile	Known to occur	In feature area
Pristis clavata Dwarf Sawfish [68447]	Nursing	Known to occur	In feature area
Pristis clavata Dwarf Sawfish [68447]	Pupping	Known to occur	In feature area
Pristis pristis Freshwater Sawfish [60756]	Foraging	Known to occur	In feature area
Pristis pristis 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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Department of Climate Change, Energy, the Environment and Water
GPO Box 3090
Canberra ACT 2601 Australia
+61 2 6274 1111

Australian Government

Department of Climate Change, Energy, the Environment and Water

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 Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Calidris tenuirostris Great Knot [862]	Vulnerable	Roosting known to occur within area	In buffer area only
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area	In buffer area only
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 buffer area only
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat known to occur within area	In feature area
Limnodromus semipalmatus Asian Dowitcher [843]	Vulnerable	Species or species habitat known to occur within area	In feature area
Limosa lapponica menzbieri Northern Siberian Bar-tailed Godwit, Russkoye Bar-tailed Godwit [86432]	Endangered	Species or species habitat known to occur within area	In buffer area only
Limosa limosa Black-tailed Godwit [845]	Endangered	Roosting known to occur within area	In buffer area only
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Papasula abbotti 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](#) 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](#) Grey Plover [865]	Vulnerable	Roosting known to occur within area	In buffer area only
[Polytelis alexandrae](#) Princess Parrot, Alexandra's Parrot [758]	Vulnerable	Species or species habitat may occur within area	In feature area
[Rostratula australis](#) Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area	In feature area
[Tringa nebularia](#) Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area	In feature area
[Tyto novaehollandiae kimberli](#) Masked Owl (northern) [26048]	Vulnerable	Species or species habitat may occur within area	In feature area
[Xenus cinereus](#) Terek Sandpiper [59300]	Vulnerable	Roosting known to occur within area	In buffer area only
FISH			
[Thunnus maccoyii](#) Southern Bluefin Tuna [69402]	Conservation Dependent	Species or species habitat likely to occur within area	In buffer area only
MAMMAL			
[Balaenoptera musculus](#) Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In buffer area only
[Macroderma gigas](#) Ghost Bat [174]	Vulnerable	Species or species habitat may occur within area	In feature area
[Macrotis lagotis](#) 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 Streaked Shearwater [1077]		Species or species habitat known to occur within area	In buffer area only
Fregata ariel Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat known to occur within area	In buffer area only
Fregata minor Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat known to 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]		Breeding known to 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
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Carcharhinus longimanus Oceanic Whitetip Shark [84108]		Species or species habitat may occur within area	In buffer area only
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	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

Scientific Name	Threatened Category	Presence Text	Buffer Status
Chelonia mydas Green Turtle [1765]	Vulnerable	Breeding known to occur within area	In buffer area only
Crocodylus porosus Salt-water Crocodile, Estuarine Crocodile [1774]		Species or species habitat likely to occur within area	In feature area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area	In buffer area only
Dugong dugon Dugong [28]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Breeding likely to occur within area	In buffer area only
Megaptera novaeangliae Humpback Whale [38]		Breeding known to occur within area	In buffer area only
Mobula alfredi as Manta alfredi Reef Manta Ray, Coastal Manta Ray [90033]		Species or species habitat may occur within area	In buffer area only
Mobula birostris as Manta birostris Giant Manta Ray [90034]		Species or species habitat may occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Breeding known to occur within area	In buffer area only
Orcaella heinsohni Australian Snubfin Dolphin [81322]		Breeding known to occur within area	In buffer area only
Orcinus orca Killer Whale, Orca [46]		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

Scientific Name	Threatened Category	Presence Text	Buffer Status
[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
[Sousa sahulensis as Sousa chinensis](#) Australian Humpback Dolphin [87942]		Breeding known to occur within area	In buffer area only
[Tursiops aduncus (Arafura/Timor Sea populations)](#) 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](#) Red-rumped Swallow [80610]		Species or species habitat known to occur within area	In feature area
[Cuculus optatus](#) Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat known to occur within area	In feature area
[Hirundo rustica](#) Barn Swallow [662]		Species or species habitat known to occur within area	In feature area
[Motacilla cinerea](#) Grey Wagtail [642]		Species or species habitat known to occur within area	In feature area
[Motacilla flava](#) Yellow Wagtail [644]		Species or species habitat known to occur within area	In feature area
Migratory Wetlands Species			
[Actitis hypoleucos](#) Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
[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 alba](#) Sanderling [875]		Roosting known to occur within area	In buffer area only
[Calidris canutus](#) Red Knot, Knot [855]	Vulnerable	Species or species habitat known to 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
[Calidris melanotos](#) Pectoral Sandpiper [858]		Species or species habitat known to occur within area	In feature area
[Calidris ruficollis](#) Red-necked Stint [860]		Roosting known to occur within area	In buffer area only
[Calidris tenuirostris](#) Great Knot [862]	Vulnerable	Roosting known to occur within area	In buffer area only
[Charadrius bicinctus](#) Double-banded Plover [895]		Roosting known to occur within area	In buffer area only
[Charadrius leschenaultii](#) Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
[Charadrius mongolus](#) Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area	In buffer area only
[Charadrius veredus](#) Oriental Plover, Oriental Dotterel [882]		Roosting known to occur within area	In feature area
[Gallinago megala](#) Swinhoe's Snipe [864]		Roosting likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Gallinago stenura Pin-tailed Snipe [841]		Roosting likely to occur within area	In buffer area only
Glareola maldivarum Oriental Pratincole [840]		Roosting known to occur within area	In feature area
Limicola falcinellus Broad-billed Sandpiper [842]		Roosting known to occur within area	In buffer area only
Limnodromus semipalmatus Asian Dowitcher [843]	Vulnerable	Species or species habitat known to occur within area	In feature area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In buffer area only
Limosa limosa Black-tailed Godwit [845]	Endangered	Roosting known to occur within area	In buffer area only
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Numenius minutus Little Curlew, Little Whimbrel [848]		Roosting known to occur within area	In buffer area only
Numenius phaeopus Whimbrel [849]		Roosting known to occur within area	In buffer area only
Pandion haliaetus Osprey [952]		Breeding known to occur within area	In buffer area only
Pluvialis fulva Pacific Golden Plover [25545]		Roosting known to occur within area	In buffer area only
Pluvialis squatarola Grey Plover [865]	Vulnerable	Roosting known to occur within area	In buffer area only
Tringa brevipes Grey-tailed Tattler [851]		Roosting known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Tringa glareola](#) Wood Sandpiper [829]		Roosting known to occur within area	In buffer area only
[Tringa nebularia](#) Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area	In feature area
[Tringa stagnatilis](#) Marsh Sandpiper, Little Greenshank [833]		Roosting known to occur within area	In buffer area only
[Tringa totanus](#) Common Redshank, Redshank [835]		Roosting known to occur within area	In buffer area only
[Xenus cinereus](#) 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 Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Anous stolidus Common Noddy [825]		Species or species habitat likely to occur within area	In buffer area only
Anseranas semipalmata Magpie Goose [978]		Species or species habitat may occur within area overfly marine area	In feature area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Arenaria interpres Ruddy Turnstone [872]	Vulnerable	Roosting known to occur within area	In buffer area only
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Roosting known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris alba Sanderling [875]		Roosting known to occur within area	In buffer area only
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat known to occur within area overfly marine area	In feature area
Calidris ruficollis Red-necked Stint [860]		Roosting known to occur within area overfly marine area	In buffer area only
Calidris tenuirostris Great Knot [862]	Vulnerable	Roosting known to occur within area overfly marine area	In buffer area only
Calonectris leucomelas Streaked Shearwater [1077]		Species or species habitat known to occur within area	In buffer area only
Cecropis daurica as Hirundo daurica Red-rumped Swallow [80610]		Species or species habitat known to occur within area overfly marine area	In feature area
Chalcites osculans as Chrysococcyx osculans Black-eared Cuckoo [83425]		Species or species habitat known to occur within area overfly marine area	In feature area
Charadrius bicinctus Double-banded Plover [895]		Roosting known to occur within area overfly marine area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area	In buffer area only
Charadrius ruficapillus Red-capped Plover [881]		Roosting known to occur within area overfly marine area	In buffer area only
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Roosting known to occur within area overfly marine area	In feature area
Fregata ariel Lesser Frigatebird, Least Frigatebird [1012]		Species or species habitat known to occur within area	In buffer area only
Fregata minor Great Frigatebird, Greater Frigatebird [1013]		Species or species habitat known to occur within area	In buffer area only
Gallinago megala Swinhoe's Snipe [864]		Roosting likely to occur within area overfly marine area	In buffer area only
Gallinago stenura Pin-tailed Snipe [841]		Roosting likely to occur within area overfly marine area	In buffer area only
Glareola maldivarum Oriental Pratincole [840]		Roosting known to occur within area overfly marine area	In feature area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
Himantopus himantopus Pied Stilt, Black-winged Stilt [870]		Roosting known to occur within area overfly marine area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Hirundo rustica Barn Swallow [662]		Species or species habitat known to occur within area overfly marine area	In feature area
Limicola falcinellus Broad-billed Sandpiper [842]		Roosting known to occur within area overfly marine area	In buffer area only
Limnodromus semipalmatus Asian Dowitcher [843]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In buffer area only
Limosa limosa Black-tailed Godwit [845]	Endangered	Roosting known to occur within area overfly marine area	In buffer area only
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat known to occur within area overfly marine area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat known to occur within area overfly marine area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Numenius minutus 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 Whimbrel [849]		Roosting known to occur within area	In buffer area only
Pandion haliaetus Osprey [952]		Breeding known to occur within area	In buffer area only
Papasula abbotti Abbott's Booby [59297]	Endangered	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
Pluvialis fulva Pacific Golden Plover [25545]		Roosting known to occur within area	In buffer area only
Pluvialis squatarola Grey Plover [865]	Vulnerable	Roosting known to occur within area overfly marine area	In buffer area only
Recurvirostra novaehollandiae Red-necked Avocet [871]		Roosting known to occur within area overfly marine area	In buffer area only
Rostratula australis as Rostratula benghalensis (sensu lato) 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 Little Tern [82849]		Breeding known to occur within area	In buffer area only
Tringa brevipes as Heteroscelus brevipes Grey-tailed Tattler [851]		Roosting known to occur within area	In buffer area only
Tringa glareola Wood Sandpiper [829]		Roosting known to occur within area overfly marine area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Tringa stagnatilis](#) Marsh Sandpiper, Little Greenshank [833]		Roosting known to occur within area overfly marine area	In buffer area only
[Tringa totanus](#) Common Redshank, Redshank [835]		Roosting known to occur within area overfly marine area	In buffer area only
[Xenus cinereus](#) Terek Sandpiper [59300]	Vulnerable	Roosting known to occur within area overfly marine area	In buffer area only
Fish			
[Campichthys tricarinatus](#) Three-keel Pipefish [66192]		Species or species habitat may occur within area	In buffer area only
[Choeroichthys brachysoma](#) Pacific Short-bodied Pipefish, Short-bodied Pipefish [66194]		Species or species habitat may occur within area	In buffer area only
[Choeroichthys suillus](#) Pig-snouted Pipefish [66198]		Species or species habitat may occur within area	In buffer area only
[Corythoichthys flavofasciatus](#) Reticulate Pipefish, Yellow-banded Pipefish, Network Pipefish [66200]		Species or species habitat may occur within area	In buffer area only
[Cosmocampus banneri](#) Roughridge Pipefish [66206]		Species or species habitat may occur within area	In buffer area only
[Doryrhamphus excisus](#) 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](#) Cleaner Pipefish, Janss' Pipefish [66212]		Species or species habitat may occur within area	In buffer area only
[Filicampus tigris](#) 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 Brock's Pipefish [66219]		Species or species habitat may occur within area	In buffer area only
Halicampus grayi Mud Pipefish, Gray's Pipefish [66221]		Species or species habitat may occur within area	In buffer area only
Halicampus nitidus Glittering Pipefish [66224]		Species or species habitat may occur within area	In buffer area only
Halicampus spinirostris Spiny-snout Pipefish [66225]		Species or species habitat may occur within area	In buffer area only
Haliichthys taeniophorus Ribboned Pipehorse, Ribboned Seadragon [66226]		Species or species habitat may occur within area	In buffer area only
Hippichthys penicillus Beady Pipefish, Steep-nosed Pipefish [66231]		Species or species habitat may occur within area	In buffer area only
Hippocampus histrix Spiny Seahorse, Thorny Seahorse [66236]		Species or species habitat may occur within area	In buffer area only
Hippocampus kuda Spotted Seahorse, Yellow Seahorse [66237]		Species or species habitat may occur within area	In buffer area only
Hippocampus planifrons Flat-face Seahorse [66238]		Species or species habitat may occur within area	In buffer area only
Hippocampus spinosissimus Hedgehog Seahorse [66239]		Species or species habitat may occur within area	In buffer area only
Hippocampus trimaculatus 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](#) Tidepool Pipefish [66255]		Species or species habitat may occur within area	In buffer area only
[Solegnathus hardwickii](#) Pallid Pipehorse, Hardwick's Pipehorse [66272]		Species or species habitat may occur within area	In buffer area only
[Solegnathus lettiensis](#) Gunther's Pipehorse, Indonesian Pipefish [66273]		Species or species habitat may occur within area	In buffer area only
[Solenostomus cyanopterus](#) Robust Ghostpipefish, Blue-finned Ghost Pipefish, [66183]		Species or species habitat may occur within area	In buffer area only
[Syngnathoides biaculeatus](#) Double-end Pipehorse, Double-ended Pipehorse, Alligator Pipefish [66279]		Species or species habitat may occur within area	In buffer area only
[Trachyrhamphus bicoarctatus](#) Bentstick Pipefish, Bend Stick Pipefish, Short-tailed Pipefish [66280]		Species or species habitat may occur within area	In buffer area only
[Trachyrhamphus longirostris](#) Straightstick Pipefish, Long-nosed Pipefish, Straight Stick Pipefish [66281]		Species or species habitat may occur within area	In buffer area only
Mammal			
[Dugong dugon](#) Dugong [28]		Foraging, feeding or related behaviour 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 duboisii](#) Dubois' Sea Snake, Dubois' Seasnake, Reef Shallows Sea Snake [1116]		Species or species habitat may 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

Scientific Name	Threatened Category	Presence Text	Buffer Status
Aipysurus laevis 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 Mosaic Sea Snake [87261]		Species or species habitat may occur within area	In buffer area only
Aipysurus tenuis Brown-lined Sea Snake, Mjoberg's Sea Snake [1121]		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
Crocodylus johnstoni Freshwater Crocodile, Johnston's Crocodile, Johnstone's Crocodile [1773]		Species or species habitat may occur within area	In feature area
Crocodylus porosus Salt-water Crocodile, Estuarine Crocodile [1774]		Species or species habitat likely to occur within area	In feature area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area	In buffer area only
Emydocephalus annulatus Eastern Turtle-headed Sea Snake [1125]		Species or species habitat may occur within area	In buffer area only
Ephalophis greyi Mangrove Sea Snake [1127]		Species or species habitat may occur within area	In buffer area only
Eretmochelys imbricata Hawksbill Turtle [1766]	Vulnerable	Breeding likely to occur within area	In buffer area only
Hydrelaps darwiniensis 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 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 Spine-bellied Sea Snake [93516]		Species or species habitat may occur within area	In buffer area only
Hydrophis kingii as Disteira kingii Spectacled Sea Snake [93511]		Species or species habitat may occur within area	In buffer area only
Hydrophis macdowelli as Hydrophis mcdowelli 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 Olive-headed Sea Snake [93512]		Species or species habitat may occur within area	In buffer area only
Hydrophis ornatus 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 Horned Sea Snake [93509]		Species or species habitat may occur within area	In buffer area only
Hydrophis platurus as Pelamis platurus Yellow-bellied Sea Snake [93517]		Species or species habitat may occur within area	In buffer area only
Hydrophis stokesii as Astrotia stokesii Stokes' Sea Snake [93510]		Species or species habitat may occur within area	In buffer area only
Natator depressus 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 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 Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area	In buffer area only
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area	In buffer area only
Megaptera novaeangliae Humpback Whale [38]		Breeding known to occur within area	In buffer area only
Orcaella heinsohni Australian Snubfin Dolphin [81322]		Breeding known to occur within area	In buffer area only
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In buffer area only
Sousa sahulensis Australian Humpback Dolphin [87942]		Breeding known to occur within area	In buffer area only
Stenella attenuata Spotted Dolphin, Pantropical Spotted Dolphin [51]		Species or species habitat may occur within area	In buffer area only
Tursiops aduncus 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) 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. 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 Australian Snubfin Dolphin [81322]	Breeding	Known to occur	In buffer area only
Orcaella heinsohni Australian Snubfin Dolphin [81322]	Calving	Known to occur	In buffer area only
Orcaella heinsohni Australian Snubfin Dolphin [81322]	Foraging (high density prey)	Known to occur	In buffer area only
Sousa chinensis Indo-Pacific Humpback Dolphin [50]	Breeding	Known to occur	In buffer area only
Sousa chinensis Indo-Pacific Humpback Dolphin [50]	Calving	Known to occur	In buffer area only
Sousa chinensis Indo-Pacific Humpback Dolphin [50]	Foraging (high density prey)	Known to occur	In buffer area only
Tursiops aduncus Indo-Pacific/Spotted Bottlenose Dolphin [68418]	Breeding	Known to occur	In buffer area only
Tursiops aduncus Indo-Pacific/Spotted Bottlenose Dolphin [68418]	Calving	Known to occur	In buffer area only
Tursiops aduncus Indo-Pacific/Spotted Bottlenose Dolphin [68418]	Foraging	Known to occur	In buffer area only
Dugong			
Dugong dugon Dugong [28]	Foraging	Known to occur	In buffer area only
Dugong dugon Dugong [28]	Foraging	Likely to occur	In buffer area only
Dugong dugon Dugong [28]	Migration likely	Known to occur	In buffer area only
Marine Turtles			
Natator depressus Flatback Turtle [59257]	Internesting buffer	Known to occur	In buffer area only

Scientific Name	Behaviour	Presence	Buffer Status
River shark			
Pristis pristis Freshwater Sawfish [60756]	Foraging	Known to occur	In buffer area only
Pristis pristis Freshwater Sawfish [60756]	Juvenile	Known to occur	In buffer area only
Pristis pristis Freshwater Sawfish [60756]	Pupping	Known to occur	In buffer area only
Pristis zijsron Green Sawfish [68442]	Foraging	Known to occur	In buffer area only
Pristis zijsron Green Sawfish [68442]	Pupping	Known to occur	In buffer area only
Seabirds			
Fregata ariel Lesser Frigatebird [1012]	Breeding	Known to occur	In buffer area only
Sternula albifrons sinensis Little Tern [82850]	Breeding	Known to occur	In buffer area only
Sternula albifrons sinensis Little Tern [82850]	Resting	Known to occur	In buffer area only
Whales			
Balaenoptera musculus brevicauda Pygmy Blue Whale [81317]	Distribution	Known to occur	In buffer area only
Megaptera novaeangliae Humpback Whale [38]	Migration (north and south)	Known to occur	In buffer area only

Caveat

1 PURPOSE

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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.

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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

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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:

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

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- seals which have only been mapped for breeding sites near the Australian continent

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

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

Acknowledgements

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-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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Department of Climate Change, Energy, the Environment and Water
GPO Box 3090
Canberra ACT 2601 Australia
+61 2 6274 1111

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. Number is the current name ID.			
Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may 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 known to occur within area	In feature area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Pezoporus occidentalis 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](#) Princess Parrot, Alexandra's Parrot [758]	Vulnerable	Species or species habitat may occur within area	In feature area
[Rostratula australis](#) Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area	In feature area
MAMMAL			
[Macroderma gigas](#) Ghost Bat [174]	Vulnerable	Species or species habitat may occur within area	In feature area
[Macrotis lagotis](#) Greater Bilby [282]	Vulnerable	Species or species habitat may occur within area	In feature area
[Trichosurus vulpecula arnhemensis](#) Northern Brushtail Possum [83091]	Vulnerable	Species or species habitat may occur within area	In feature area
REPTILE			
[Liopholis kintorei](#) 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](#) 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
[Varanus mitchelli](#) Mitchell's Water Monitor [1569]	Critically Endangered	Species or species habitat may occur within area	In feature area
SHARK			
[Pristis pristis](#) Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area	In buffer area only

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](#) Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Migratory Marine Species			
[Pristis pristis](#) Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Migratory Terrestrial Species			
[Hirundo rustica](#) Barn Swallow [662]		Species or species habitat may occur within area	In feature area
[Motacilla cinerea](#) Grey Wagtail [642]		Species or species habitat may occur within area	In feature area
[Motacilla flava](#) Yellow Wagtail [644]		Species or species habitat may occur within area	In feature area
Migratory Wetlands Species			
[Actitis hypoleucos](#) Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
[Calidris acuminata](#) Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
[Calidris ferruginea](#) Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
[Calidris melanotos](#) Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
[Charadrius veredus](#) Oriental Plover, Oriental Dotterel [882]		Species or species habitat may occur within area	In feature area
[Glareola maldivarum](#) 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](#) Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
[Calidris ferruginea](#) Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area	In feature area
[Calidris melanotos](#) Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
[Chalcites osculans as Chrysococcyx osculans](#) Black-eared Cuckoo [83425]		Species or species habitat may occur within area overfly marine area	In feature area
[Charadrius veredus](#) Oriental Plover, Oriental Dotterel [882]		Species or species habitat may occur within area overfly marine area	In feature area
[Glareola maldivarum](#) Oriental Pratincole [840]		Species or species habitat may occur within area overfly marine area	In feature area
[Haliaeetus leucogaster](#) White-bellied Sea-Eagle [943]		Species or species habitat may occur within area	In buffer area only
[Hirundo rustica](#) Barn Swallow [662]		Species or species habitat may occur within area overfly marine area	In feature area
[Merops ornatus](#) Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
[Motacilla cinerea](#) Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Motacilla flava](#) Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area	In feature area
[Rostratula australis as Rostratula benghalensis (sensu lato)](#) Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area overfly marine area	In feature area
Reptile			
[Crocodylus johnstoni](#) Freshwater Crocodile, Johnston's Crocodile, Johnstone's Crocodile [1773]		Species or species habitat may occur within area	In feature area

Extra Information

Caveat

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-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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Department of Climate Change, Energy, the Environment and Water
GPO Box 3090
Canberra ACT 2601 Australia
+61 2 6274 1111

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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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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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. Nearest specimen recorded 3 km outside survey area, however suitable habitat is unlikely to occur.	Highly Unlikely 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. Nearest specimen recorded 19km outside survey area. Suitable habitat may be present.	Unlikely 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. Nearest specimen recorded 15 km outside survey area. Suitable habitat may be present.	Unlikely 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 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. 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 Nearest record 9 km from the survey area (Site C) Suitable habitat unlikely to occur within the survey area.	Highly Unlikely 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 Nearest record 7 km from the survey area (Site D). Suitable habitat unlikely to occur within the survey area.	Highly Unlikely 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 Nearest record 7 km from the survey area (Site I). Suitable habitat unlikely to occur within the survey area.	Highly Unlikely 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 Nearest record 6 km from the survey area (Site D). Suitable habitat unlikely to occur within the survey area.	Unlikely 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 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. 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 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 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 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 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 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 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. Flowers pink/purple, April to October. Pindan sand.	Potential 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 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. 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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 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

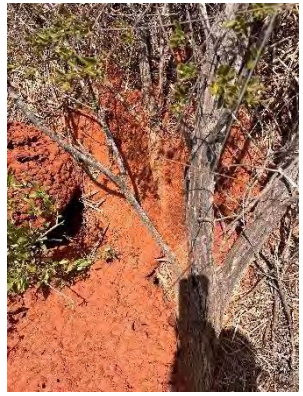
No.	Type	Field comment	Hollow – 1 No hollow - 0	Date	Eastings	Northings
621	Habitat tree	euc habitat tree numerous hollows	1	9/03/2024	426087.5	8018070.1
622	Habitat tree	euc habitat tree numerous hollows	1	9/03/2024	425519.8	8018159.4
623	Habitat tree	euc habitat tree	0	9/03/2024	425482.3	8018264.2
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 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 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 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	

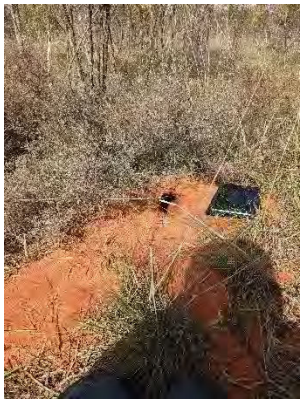
No.	Site	Observation	Species	Date	Lat	Long	Comment	Photo
13	Site F	Burrow	*Macrotis lagotis*	8/03/2024	-17.86664343330	122.278616550	Bilby burrow, smaller animal	
14	Site F	Burrow	*Macrotis lagotis*	8/03/2024	-17.873037	122.279258	burrow has side mark used within the week	
15	Site F	Burrow	*Macrotis 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 (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 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: There is limited (i.e. the type, quality and quantity of the habitat is generally poor or restricted) habitat in the Survey Area. 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 Those species that have a known distribution overlapping with the Survey Area however: There is limited habitat in the Survey Area (i.e. the type, quality and quantity of the habitat is generally poor or restricted). 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: Those species that have no suitable habitat within the Survey Area. 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
		EP BC Act	BC Act /DBCA		Pre-site visit	Post-site visit	
						(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

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	
				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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				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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				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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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
		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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				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
		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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				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
		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 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 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

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		EP BC Act	BC Act /DBCA		Pre-site visit	Post-site visit	
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

Taxon	Common Name	Status		Description and Habitat Requirements	Likelihood of occurrence within survey area. Broome Sites F, G, H		Source
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				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, 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
		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). 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. This species is known to occur locally coastline areas,	Highly unlikely. This species is known to occur locally coastline areas, however the	PMST

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					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. 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
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. This species is known to occur locally coastline areas, however the survey area lacks suitable habitat.	Highly unlikely. 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

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				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

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	
				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. 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
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. This species is known to occur locally	Highly unlikely. This species is known to occur	DBCA, Naturemap

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				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. 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 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
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
		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
		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). 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
		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
		EP BC Act	BC Act /DBCA		Pre-site visit	Post-site visit	
				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). 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
		EP BC Act	BC Act /DBCA		Pre-site visit	Post-site visit	
				teeth on each side of its saw (Allen 1989a; Phillips et al. 2008). 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.). 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. 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
		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). 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
		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
		EP BC Act	BC Act /DBCA		Pre-site visit	Post-site visit	
				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
		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 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

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				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

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		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

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				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

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		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). 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 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

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		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

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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
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					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

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				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). 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). 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. 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). 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

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		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). 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 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 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 & 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). 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). 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). 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). 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. 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). 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). 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). 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). 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). 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. 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). 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). 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. 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). 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.). 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). 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). 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). 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). 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, 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

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		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, 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. 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). 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

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 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							

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	
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. The current distribution of the Great Desert Skink consists of seven isolated populations and exceeds 5000 individuals (McAlpin 2001). 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). 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 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 ALA

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 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 ALA



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