FORRESTANIA PROJECT

Reconnaissance Flora-Vegetation and Basic Fauna Survey

Prepared for IGO Limited
March 2025

Prepared by
BOTANICA CONSULTING
33 Brewer St PERTH WA 6000 | 0419 916 034

Document Information

Prepared for: IGO Ltd
Project Name: Forrestania
Tenements: Mt Hope: E77/1773, E77/1436 and M77/389; Crossroads: E77/2856, M77/329, M77/467, M77/098, M77/585, M77/912, M77/584, M77/586 and M77/589; Slowdive: M74/081 and M74/064; Hatters: E74/603
Job Reference: Reconnaissance Flora-Vegetation and Basic Fauna Survey
Job Number: 2024/112
Date: 25 March 2025
Version: FINAL

Disclaimer

Quality Assurance

An internal quality review process has been implemented to each project task undertaken by BC. Each document and its contents is carefully reviewed by core members of the Consultancy team and signed off at Director Level prior to issue to the client. Draft documents are submitted to the client for comment and acceptance prior to final production.

Cover Photo: Mallee Woodland in the Crossroads survey area (taken November 2024).

Prepared by: Amy Johnston
Graduate Environmental Consultant
Botanica Consulting

Jennifer Jackson
Senior Environmental Consultant
Botanica Consulting

Reviewed by: Andrea Williams
Director
Botanica Consulting

Approved by: Jim Williams
Director
Botanica Consulting

Contents

Tables

Figures

Appendices

EXECUTIVE SUMMARY

Botanica Consulting Pty Ltd (Botanica) was commissioned by IGO Ltd (IGO) to undertake a reconnaissance flora/vegetation and basic fauna assessment of the Forrestania Project exploration program (referred to as the 'survey area'). The survey area is comprised of drill lines in four areas (Mt Hope, Crossroads, Slowdive and Hatters) that are spread approximately 78 km apart. The survey area was approximately 210 ha and is located approximately 77-113 km east of Hyden, Western Australia (Figure 1-1).

Botanica conducted a reconnaissance flora and vegetation survey and a basic terrestrial vertebrate fauna survey of the survey area from the 6-9th of November 2024. The area was traversed with a four-wheel drive vehicle and walking by Jim Williams (Director/Principal Botanist) and Valentin Roure (Field Technician).

The survey area lies within the Coolgardie and Mallee bioregions of Western Australia, specifically within the Southern Cross (COO2) and Western Mallee subregion (MAL2) as defined by the Interim Biogeographic Regionalisation of Australia (IBRA). The project area is located within the Shire of Kondinin, the Shire of Yilgarn and the Shire of Lake Grace on exploration and mining tenements.

Vegetation of the Western Mallee Subregion in the Southwest Botanical Province is predominantly Mallee over myrtaceous-proteaceous heaths on duplex (sand over clay) soils. It is also characterised by Melaleuca shrublands on alluvia, and Tecticornia low shrublands on saline alluvium. A mosaic of mixed Eucalypt woodlands and mallee occur on calcareous earth plains and sandplains (Beecham and Danks, 2001). The six Pre European vegetation associations within the project area retain >96% of their pre-European extent.

Prior to the field survey, desktop assessments were undertaken for flora and fauna to identify any potential significant flora, vegetation and fauna that may occur within the survey area.

Seventeen vegetation types were identified within the Mt Hope survey area from the field survey. These vegetation types were located within three different landform types and comprised of three major vegetation groups. The field survey identified 130 vascular flora taxa within the survey area. These taxa represented 73 genera across 37 families, with the most diverse families being Myrtaceae and Fabaceae. Dominant genera include *Acacia, Melaleuca* and *Eucalyptus.*

Seventeen vegetation types were identified within the Crossroads survey area from the field survey. These vegetation types were located within four different landform types and comprised of three major vegetation groups. The field survey identified 129 vascular flora taxa within the survey area. These taxa represented 53 genera across 25 families, with the most diverse families being Myrtaceae, Fabaceae and Proteaceae. Dominant genera include *Acacia, Melaleuca* and *Eucalyptus.*

Six vegetation types were identified within the Slowdive and Hatters Hill survey area from the field survey. These vegetation types were located within three different landform types and comprised of three major vegetation groups. The field survey identified 93 vascular flora taxa within the survey area. These taxa represented 42 genera across 20 families, with the most diverse families being Myrtaceae and Fabaceae. Dominant genera include *Melaleuca, Acacia* and *Eucalyptus.*

Based on the vegetation condition rating scale specified in the Environmental Protection Authority (EPA) *Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment – December 2016* (EPA, 2016a), vegetation was rated as 'completely degraded' to 'very good'. Disturbances within the survey area include roads and access tracks, clearing associated with mining exploration. *Centaurea melitensis* (Maltese star-thistle) was found in the Mt Hope area, *Dittrichia graveolens* (Stinkwort) was found in the Crossroads area and no weeds were found in the Slowdive/ Hatters Hill areas.

No Threatened Flora listed under the Western Australian *Biodiversity Conservation Act 2016* (BC Act) or Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) was identified in the survey areas. Six Priority flora was identified within the survey area during the field survey. This included *Microcorys* sp. *Forrestania* (P4), *Eutaxia acanthoclada* (P3), *Teucrium diabolicum* (P3), *Eremophila inflata* (P4), *Grevillea neodissecta* (P4) and *Grevillia lullfitzii* (P1).

The field survey found no Priority Ecological Communities (PECs) occurred within the survey area. Although the survey area is within the buffer of a PEC (as provided by DBCA), the on-ground survey did not identify that this PEC was present in any of the vegetation types.

Six fauna habitats were identified in the Mt Hope and Crossroads survey area. Three fauna habitats were identified in the Slowdive/ Hatters Hills survey area. During the field survey opportunistic observations of fauna species were made with a total of 22 fauna species observed. This included five reptiles, 16 birds and one mammal species. No fauna of conservation significance were observed in the survey area.

There are no wetlands of international importance (Ramsar Wetlands) or national importance (Australian Nature Conservation Agency Wetlands) within the survey area.

Based on the outcomes from the survey undertaken, Botanica assessed the results of the desktop and field survey with regards to the native vegetation clearing principles listed under Schedule 5 of the *Environmental Protection (EP Act) 1986*. The assessment found that any proposed vegetation clearing activities may at variance with one of the clearing principles.

1 INTRODUCTION

Botanica Consulting Pty Ltd (Botanica) was commissioned by IGO Ltd to undertake a reconnaissance flora and vegetation survey and a basic terrestrial vertebrate fauna survey of the Forrestania project (referred to as the 'survey area'). The survey area was approximately 210 ha of drill lines in the Mt Hope, Crossroads, Slowdive and Hatters areas and is located approximately 77-113 km east of Hyden, Western Australia (Figure 1-1).

Botanica conducted a reconnaissance flora/vegetation and basic vertebrate fauna survey of the survey area from the 6-9th of November 2024. The area was traversed with a four-wheel drive, all-terrain vehicle and on foot by Jim Williams (Director/Principal Botanist) and Valentin Roure Field Technician).

The purpose of this survey was to support regulatory approval applications for exploration mining activities at the Forrestania Project.

The survey area lies within the Great Western Woodlands and the Mt Hope and Crossroads areas lie within the Coolgardie Bioregion, while the Slowdive and Hatters areas lie within the Mallee Bioregion as defined by the Interim Biogeographic Regionalisation of Australia (IBRA).

1.1 Objectives

The flora assessment was conducted in accordance with the requirements of a reconnaissance flora survey as defined in *Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA, 2016a). The objectives of the assessment were to:

- gather background information on flora and vegetation in the target area (literature review, database and map-based searches);
- identify significant flora, vegetation and ecological communities and assess the potential sensitivity to impact;
- conduct a field survey to verify / ground truth the desktop assessment findings;
- undertake floristic community mapping to a scale appropriate for the bioregion and described according to the National Vegetation Information System (NVIS) structure and floristics;
- undertake vegetation condition mapping;
- assess the project area's plant species diversity, density, composition, structure and weed cover, using NVIS classification system for vegetation description;
- assess Matters of National Environmental Significance (MNES) and indicate whether potential impacts on MNES as protected under the *Environment Protection and Biodiversity*

Conservation (EPBC) Act 1999 are likely to require referral of the project to the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW); and

- determine the State legislative context of environmental aspects required for the assessment.

The fauna assessment was conducted in accordance with the requirements of a basic terrestrial fauna survey as defined in *Technical Guidance - Terrestrial Fauna Surveys for Environmental Impact Assessment* (EPA, 2020). The objectives of the assessment were to:

- Undertake a literature review, including map-based information searches of all current and relevant literature sources and databases relating to the survey area;
- Undertake a desktop investigation to identify any previously recorded occurrences of or potentially occurring Threatened and Priority listed fauna within the survey area;
- Undertake searches on available databases for details relating to any Threatened and Priority listed fauna previously identified as occurring or potentially occurring within the survey area;
- Conduct fauna habitat mapping and identify habitat types which are suitable for each significant fauna considered likely or possible to occur, or fauna recorded in the survey area;
- Compile an inventory of fauna species occurrences within the survey area;
- Undertake opportunistic, low intensity sampling of fauna; and
- Report on the conservation status of species present using the Western Australian Museum and EPBC Act databases for presence of Threatened and Priority listed fauna species within the survey area.

In addition a targeted fauna survey for conservation significant fauna was conducted, as defined in *Technical Guidance - Terrestrial Fauna Surveys for Environmental Impact Assessment* (EPA, 2020). The objectives of this assessment were to:

- Identify conservation significant fauna species that are or may be present;
- Identify conservation significant fauna habitat that can be avoided during exploration activities.

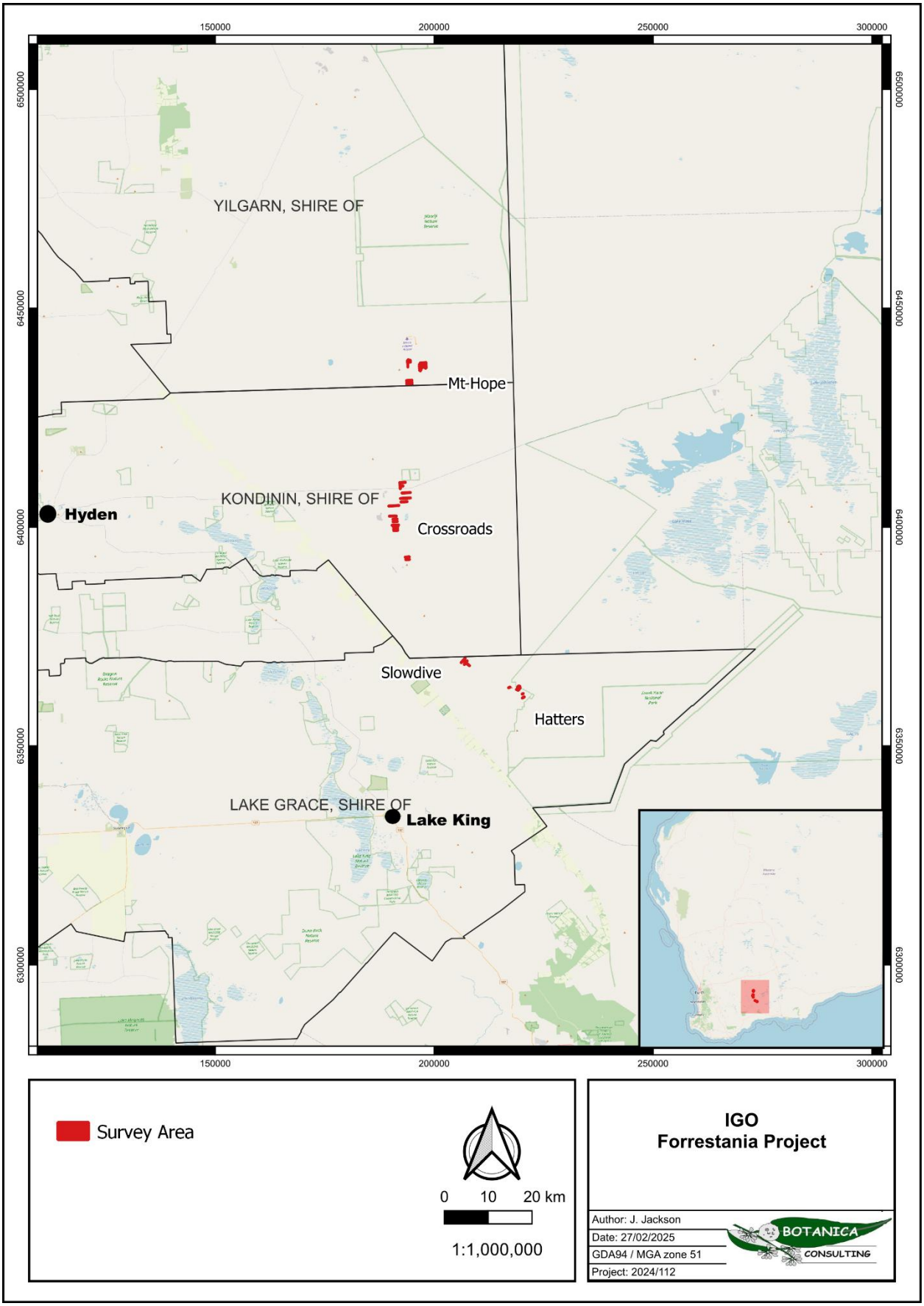


Figure 1-1: Regional Location of the Survey Area

2 BIOPHYSICAL ENVIRONMENT

2.1 Regional Environment

The survey area lies across two Bioregions as defined by the Interim Biogeographic Regionalisation of Australia (IBRA) (DCCEEW, 2020). It is therefore located in two subregions, Western Mallee (MAL2) is a subregion of the Mallee Bioregion, and Southern Cross (COO2) is a subregion of the Coolgardie Bioregion.

The Western Mallee subregion (4,763,963 ha) lies on the south-eastern part of the Yilgarn Craton. It is described gently undulating with partly occluded drainage. Main surface-types comprise clays and silts underlain by Kankar, exposed granite, sandplains and laterite pavements. Salt lake systems occur on a granite basement, and in the east calcareous earth plains and sandplains overly Eocene limestone strata. (Beecham & Danks, 2001). The vegetation consists predominately of mallee woodland on a variety of soil types, with Mallee over myrtaceous-proteaceous heaths on duplex (sand over clay) soils being common. Eucalyptus woodlands occur mainly on fine-textured soils, with scrub-heath on sands and laterite. Melaleuca shrublands characterise alluvia, and samphire low shrublands occur on saline alluvium. In the east, mixed eucalypt woodlands and mallee occur on calcareous earth plains and sandplains (Beecham and Danks, 2001).

The Southern Cross subregion is 7, 041, 232 ha in extent and lies on the Southern Cross terrains of the Yilgarn Craton. It is characterised by subdued relief, comprising gently undulating uplands dissected by broad valleys with bands of low greenstone hills. Valleys have Quaternary duplex and graduated soils and include chains of saline playa-lakes. Upper levels in the landscape are the eroded remnants of a lateritic duricrust yielding yellow sandplains, gravelly sandplains and laterite breakaways. Vegetation consists diverse Eucalyptus woodlands with many endemic species around salt lakes, low greenstone hills, valley alluvials and broad plains of calcareous earths. (Cowan *et al,* 2001).

2.2 Land Use

The dominant land uses of the Western Mallee subregion include dry-land agriculture with lesser areas of conservation and Crown reserves (Beecham and Danks, 2001). The dominant land uses of the Southern Cross subregion include grazing native pastures (17%), UCL and crown reserves (66.74%), dryland agriculture (2.27%) and conservation reserves (11.53%) (Cowan *et al*, 2001).

The project area is located within three Shires, the Shire of Lake Grace, the Shire of Kondinin and the Shire of Yilgarn on exploration and mining tenements held by IGO.

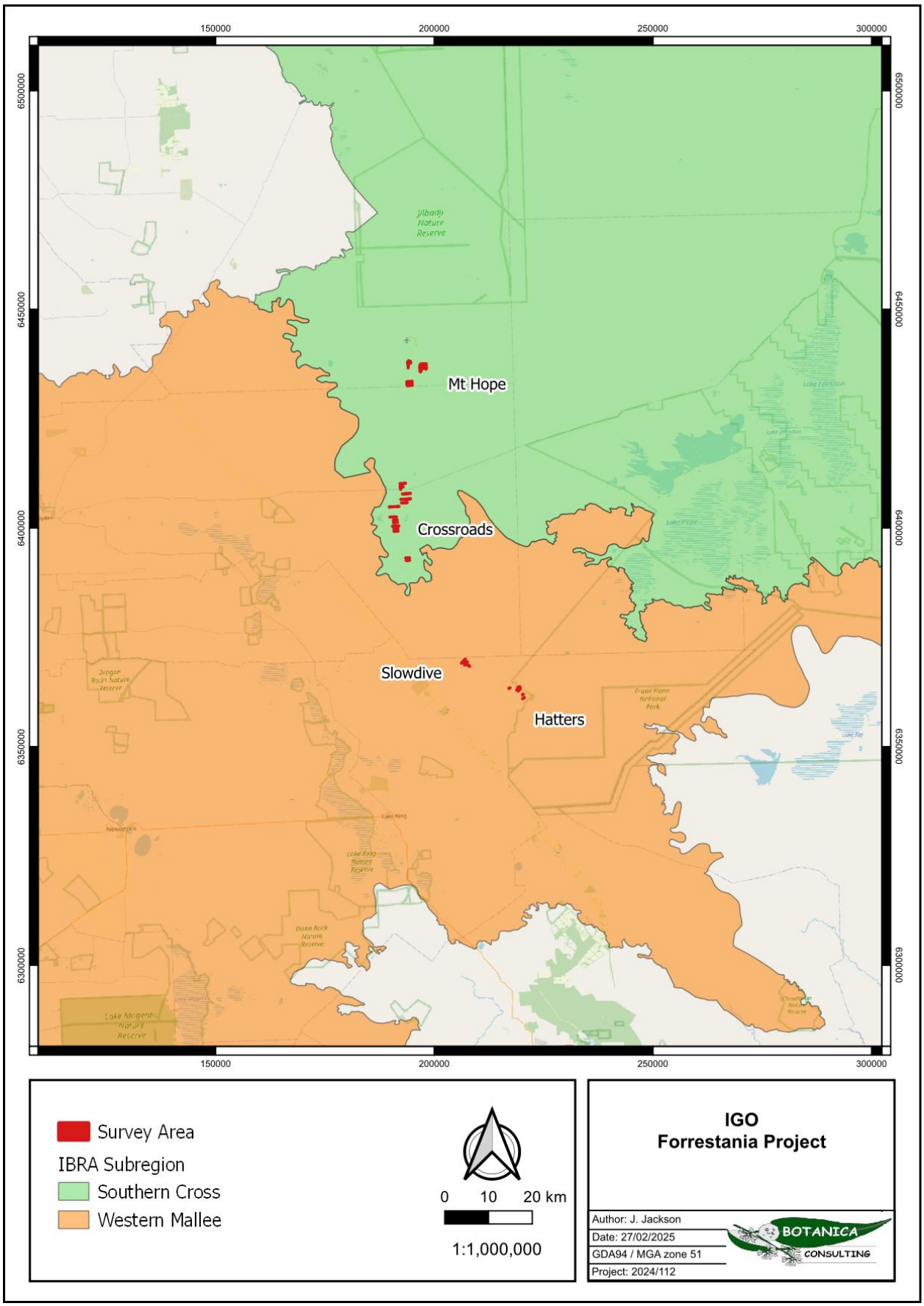


Figure 2-1: Map of the Survey Area in relation to the Western Mallee and Southern Cross IBRA subregions

2.3 Soils and Landscape Systems

The survey area lies within two Soil Landscape Provinces as described by Tille (2006), the Avon Province and the Kalgoorlie Province.

The Avon Province extends from the eastern Wheatbelt to the south coast near Denmark and Northcliffe and includes the Darling Range. The landscape consists of Laterised plateau (dissected at fringes and with saline drainage lines inland) on deeply weathered mantle and alluvium over granitic rocks of the Yilgarn Craton (and Albany-Fraser Orogen). Soil types include sandy duplexes soils and ironstone gravelly soils with loamy earths, loamy duplexes, sandy earths, deep sands and wet soils. Vegetation communities are York gum-wandoo-salmon gum- morrel-gimlet woodland and jarrah-marri-karri-wandoo woodlands/forests (with some mallee scrub, tammar-wodjil thickets and scrub-heath) (Tille, 2006).

The Kalgoorlie Province, located in the southern Goldfields between Paynes Find, Menzies, Southern Cross and Balladonia. The landscape consists of undulating plains (with some sandplains, hills and salt lakes) on the granitic rocks and greenstone of the Yilgarn Craton. Soils range from calcareous loamy earths and red loamy earths with some salt lake soils to red deep sands, yellow sandy earths, shallow loams and loamy duplexes. Vegetation communities are predominately Eucalypt woodlands with some acacia-casuarina thickets, mulga shrublands, halophytic shrublands and spinifex grasslands (Tille, 2006).

These Provinces are further divided into soil-landscape zones, with the survey area located in the South-eastern Zone of Ancient Drainage (250), the Norseman Zone (266) and the Southern Cross Zone (261).

The South-eastern Zone of Ancient Drainage is located in the southern Wheatbelt between Kondinin, Lake Grace, Gnowangerup, Frank Hann National Park and Mt Holland. It consists of Gently undulating terrain (with some salt lake chains and areas of prominent granitic outcrops) on deeply weathered mantle and alluvium over granitic rocks of the Yilgarn Craton. Sandy duplexes (often alkaline) with ironstone gravelly soils and Loamy earths (often calcareous) and some loamy duplexes, sandy earths, deep sands and saline wet soils. Vegetation includes mallee scrub and salmon gum-gimlet-morrel woodlands (and some scrub-heath) (Tille, 2006).

The Norseman zone is located in the southern Goldfields between Koolyanobbing, Menzies, Zanthus (Trans-Australian Railway), Norseman and Lake Hope. The landscape consists of undulating plains and uplands (with some sandplains and salt lakes) on granitic rocks of the Yilgarn Craton. Soils include calcareous loamy earths, yellow sandy and loamy earths, red loamy earths, red deep sands and salt lake soils. Vegetation consists of salmon gum-redwood-merrit-red mallee-gimlet woodland with acacia/casuarina thickets (and some mulga shrublands and spinifex grasslands).

The Southern Cross zone is located in the eastern Wheatbelt/south-western Goldfields between Bullfinch and Mt Holland and contains Undulating plains and uplands (with some salt lake and low hills) on deeply weathered mantle, colluvium and alluvium over greenstone and granitic rocks of the Yilgarn Craton. Soils consist of calcareous loamy earths, red and yellow loamy earths and alkaline deep and shallow sandy duplexes with some yellow sandy earths, salt lake soils, yellow deep sands and red shallow loamy duplexes. Vegetation includes salmon gum-gimlet-morrel-York gum woodlands with acacia-casuarina thickets and some mallee, scrub-heath and halophytic shrublands.

These zones are further divided into soil landscape systems within the soil landscape systems of the survey area described in Table 2-1 and shown in Figure 2-2.

Table 2-1: Soil landscape systems within the survey area

Zone	Soil Landscape System		Description
The Southeastern Zone of Ancient Drainage (250)	X17	250X17	Slopes and valleys.
	JJ16	250JJ16	Broken terrain characterized by rock outcrops (granitic bosses and tors) which may cover very large areas within the unit.
	Lb10	250Lb10	Gently undulating plains with some granitic bosses and tors; acid clays common below depths of 6*
Southern Cross Zone (261)	Ya28	261Ya28	Sandy plains with some clay pans and small salt lakes, dunes, and lunettes.
Norseman Zone (266)	DD10	266DD10	Plains with some clay pans and small salt lakes, dunes, and lunettes.
	Ya28	266Ya28	Sandy plains with some clay pans and small salt lakes, dunes, and lunettes.

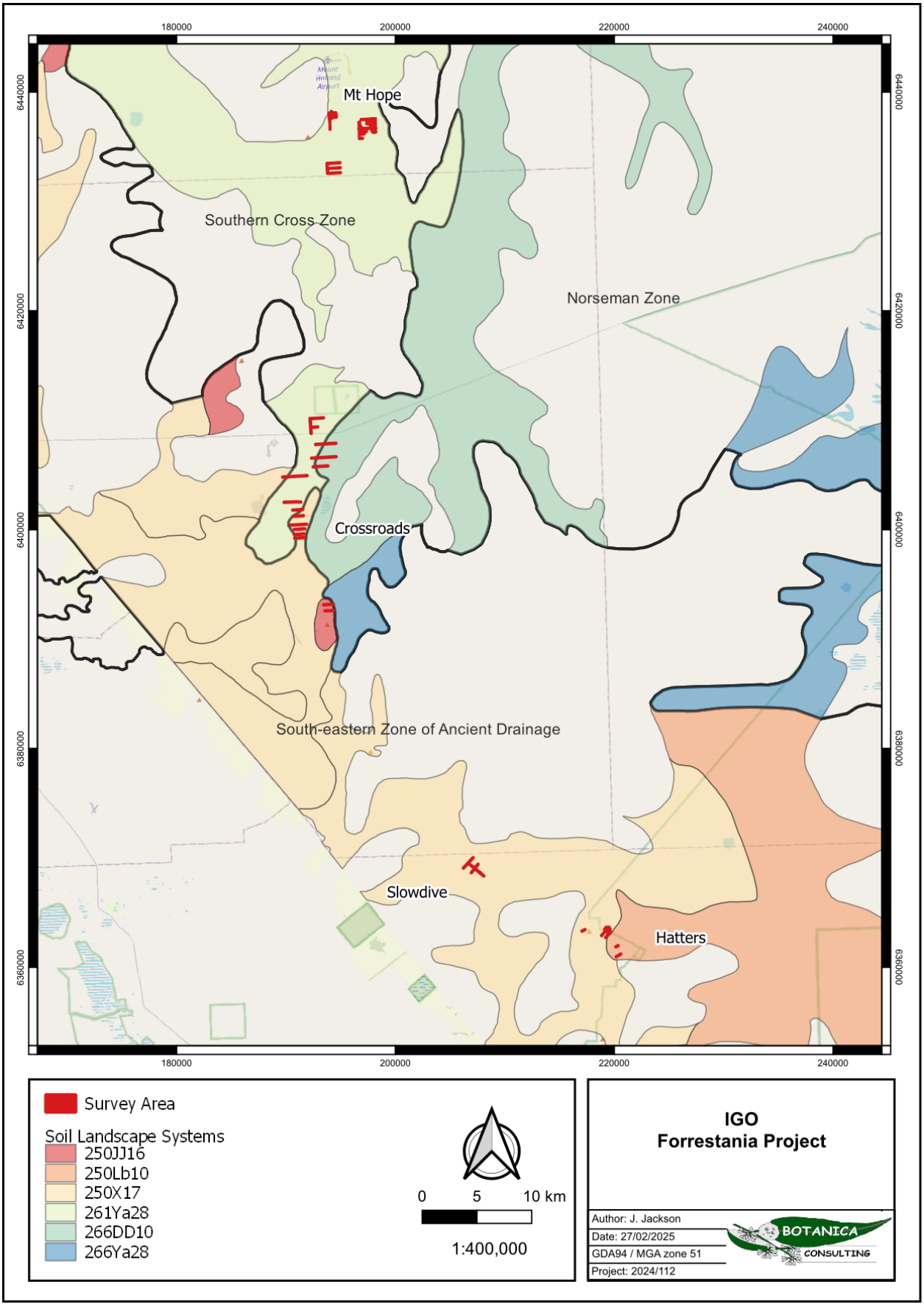


Figure 2-2: Map of Soil Landscape Systems within the Survey Area

2.4 Pre-European Vegetation

The project area lies within the Southwest and the South-Western Interzone Botanical Provinces of Western Australia.

Woodlands in the Mallee Bioregion of the Southwest Botanical Province commonly occur mid-slope and are associated with a soil described as a sandy alkaline yellow mottled duplex soil known technically as soloth. Overall, *Eucalyptus eremophila* (horned mallee) is the most consistent mallee species with *E. moderata* (redwood mallee), *E. oleosa* (giant mallee), *E. incrassata*, (lerp mallee), *E. foecunda* (narrow-leaved red mallee), *E. redunca* (black marlock) and *E. uncinata* (hook-leaved mallee) also mapped. Shrubs of one or more species of Melaleuca commonly dominate the understorey, e.g. *M. pungens* and *M. spicigera*. Acacia species and occasional small clumps of grasses may also be present (Beard *et al.,* 2013).

Vegetation of the Western Mallee Subregion is predominantly Mallee over Myrtaceous-Proteaceous heaths on duplex (sand over clay) soils. It is also characterised by Melaleuca shrublands on alluvia, and Tecticornia low shrublands on saline alluvium. A mosaic of mixed Eucalypt woodlands and mallee occur on calcareous earth plains and sandplains (Beecham and Danks, 2001).

Vegetation of the Southern Cross subregion consists of diverse Eucalyptus woodlands with many endemic species around salt lakes, low greenstone hills, valley alluvials and broad plains of calcareous earths. Typical species include *Eucalyptus salmonophloia, E. salubris*, *E. transcontinentalis* and *E. longicornis*. Salt lake surfaces support dwarf samphire shrublands, and granite outcrops in the mid-level landscapes contain swards of Borya constricta, with stands of Acacia acuminata and Eucalyptus loxophleba. Mallees (*Eucalyptus leptopoda, E. platycorys and E. scyphocalyx*) and scrub-heaths (*Allocasuarina corniculata, Callitris preissii, Melaleuca uncinata* and *Acacia beauverdiana*) occur in upland areas, as well as on sand lunettes associated with playas along the broad valley floors, and sand sheets around the granite outcrops (Cowan *et al,* 2001).

The pre-European vegetation mapping of Western Australia dataset is an output of a joint Western Australian State project. It maps original natural vegetation presumed to have existed prior to European settlement in Western Australia. The Department of Primary Industries and Regional Development GIS file (DPIRD_006) indicates that the project area is located within five pre-European Beard vegetation associations (Figure 2-3). The extent of these vegetation associations as specified in the *2018 Statewide Vegetation Statistics* (Government of Western Australia, 2019) is provided in Table 2-2.

Areas retaining less than 30% of their pre-European vegetation extent generally experience exponentially accelerated species loss, while areas with less than 10% are considered “endangered”

(EPA, 2000). The six vegetation associations within the project area retain more than 99% of their pre-European extent.

Table 2-2: Pre-European Vegetation Associations within the Project Area

IBRA Subregion	Pre-European Vegetation	Description	Pre-European Extent Remaining (%)	Current Extent Reserved for Conservation (%)
MAL2	Forrestania 486	Woodland / Mallee.	100	0
	Forrestania 511	Wheatbelt: York gum (*Eucalyptus loxophleba*), salmon gum (*E. salmonophloia*) etc.; Goldfields: gimlet (*E. salubris*), redwood (*E. oleosa*) etc.	99.76	0
	Forrestania 519	Eucalypt shrubland (*Eucalyptus eremophila*, *E. redunca*, and other *E.* spp.).	96.68	0.71
	Forrestania 936	Wheatbelt: York gum (*Eucalyptus loxophleba*), salmon gum (*E. salmonophloia*) etc.; Goldfields: gimlet (*E. salubris*), redwood (*E. oleosa*) etc.	99.46	0
COO2	Forrestania 511	Wheatbelt: York gum (*Eucalyptus loxophleba*), salmon gum (*E. salmonophloia*) etc.; Goldfields: gimlet (*E. salubris*), redwood (*E. oleosa*) etc.	99.58	9.68
	Forrestania 941	Woodland / Mallee.	99.8	0

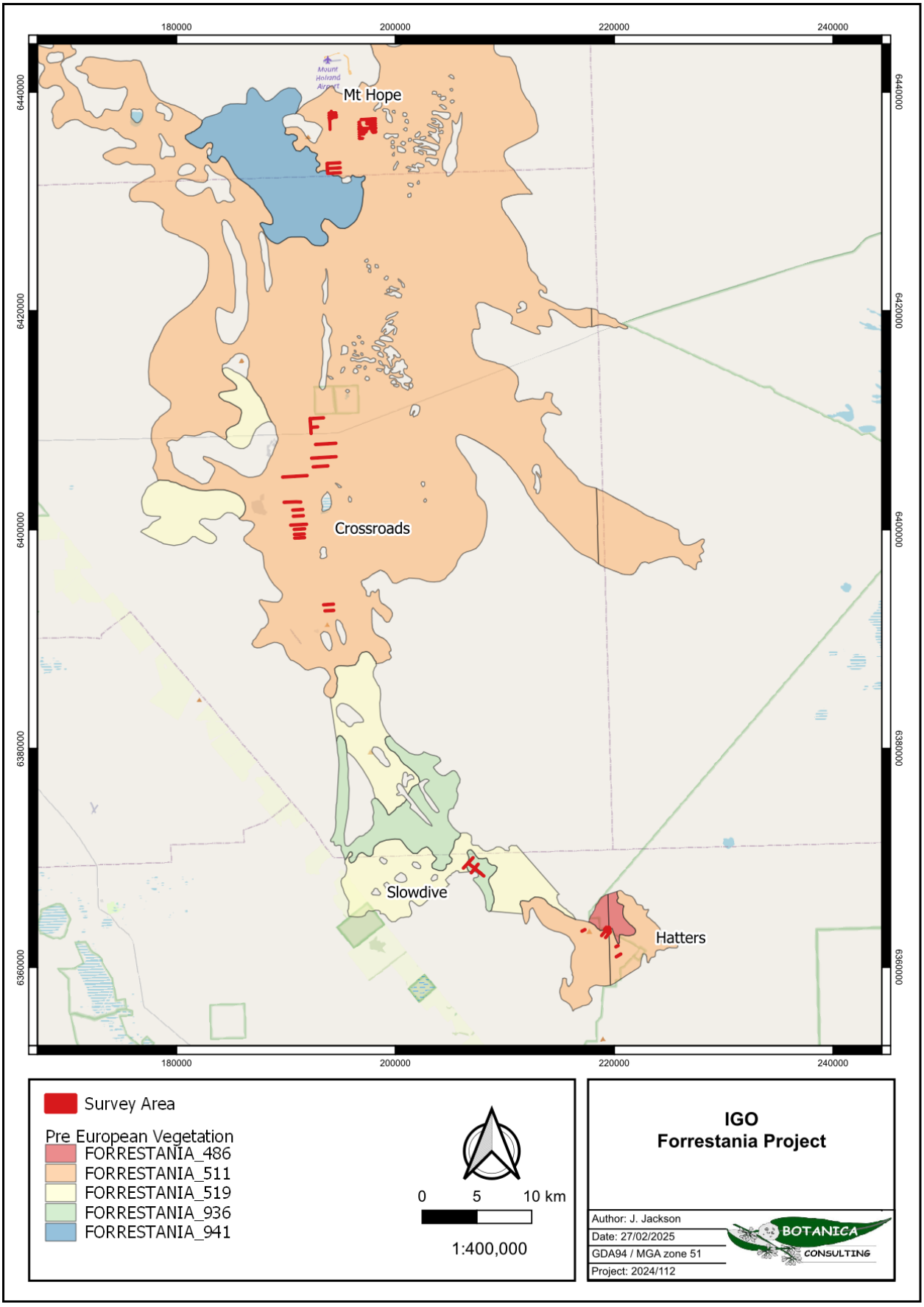
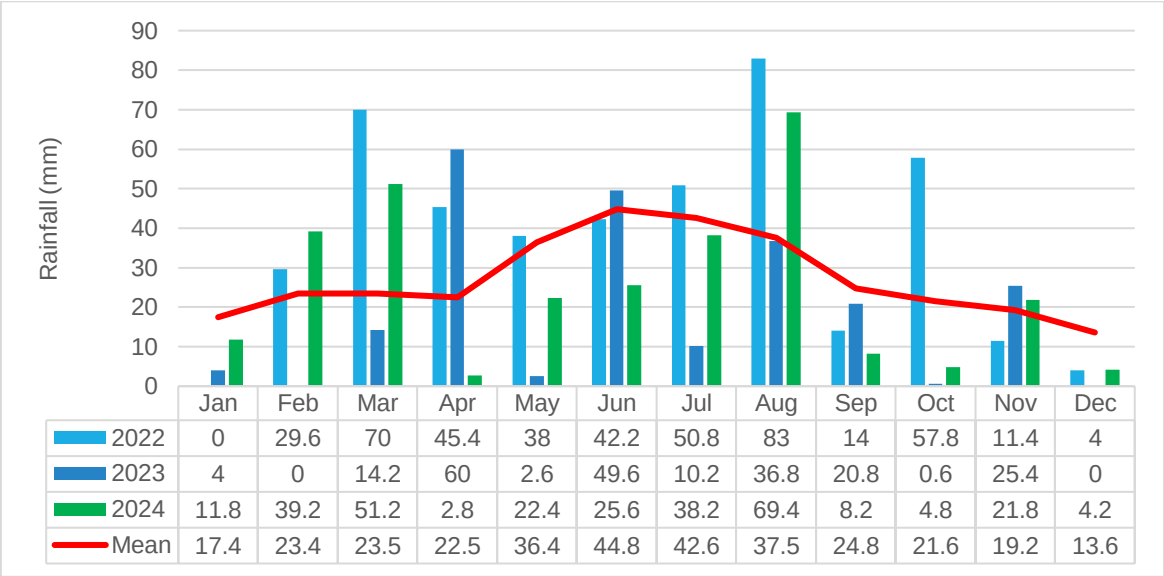


Figure 2-3: Pre-European Vegetation Associations within the Survey Area

2.5 Climate

The climate of the Western Mallee subregion is characterised as dry warm Mediterranean with an annual rainfall of 300-500mm (Beard, 1990; Beecham and Danks, 2001). The Southern Cross subregion t has an arid to semi-arid Warm Mediterranean climate with 250-300 mm of mainly winter rainfall (Cown *et al,* 2001). Rainfall data for the Holt Rock weather station (#10565) located approximately 35 km west of the survey area is shown in Figure 3-2 (BoM, 2025a). Rainfall received in August 2024 was well above average, however was below average for September and October. Survey work was undertaken in November, within the EPA recommended timing for primary surveys of the South-West and Interzone Province (i.e. Spring) (EPA, 2016a).



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2022	0	29.6	70	45.4	38	42.2	50.8	83	14	57.8	11.4	4
2023	4	0	14.2	60	2.6	49.6	10.2	36.8	20.8	0.6	25.4	0
2024	11.8	39.2	51.2	2.8	22.4	25.6	38.2	69.4	8.2	4.8	21.8	4.2
Mean	17.4	23.4	23.5	22.5	36.4	44.8	42.6	37.5	24.8	21.6	19.2	13.6

Figure 2-4: Monthly rainfall and mean monthly rainfall (January 2022 – December 2024) for the Holt Rock weather station #10565 (BoM, 2025a)

2.6 Conservation Values

The Mt Hope, Crossroads and Hatters Hill survey areas occur within the buffer of the *Ironcap Hills vegetation assemblages (Mt Holand, Middle, North and South Ironcap Hills, Digger Rock and Hatter Hill) (Greenstone Ranges)* PEC. This PEC is listed as Priority 3 by DBCA. Note that the PEC boundaries provided by DBCA include buffers to the actual communities which are not always delineated on ground, and that the presence of the PEC is best defined by targeted surveys. There are no Threatened Ecological Communities (TECs) listed under the Commonwealth EPBC Act that occur within the survey area. The TECs *Eucalypt Woodlands of the Western Australian Wheatbelt* and *Salmon Gum Woodlands* surround the survey area and are listed as Critically Endangered under the EPBC Act and Priority 3 under DBCA. The PEC *Plant assemblages of the Parker Range System* is located 23 km North of the Mt Hope survey area and is listed as a Priority 3 PEC under DBCA.

The Crossroads survey area is located within an Environmentally Sensitive Area (ESAs) as listed under the EP Act, this ESA is based on the proposed interim protected area, from the Environmental Protection Authority (EPA) of Western Australia's Redbook Recommended Conservation Reserves (EPA, 1993). There are numerous other small ESAs within 20 km of the survey area, these are likely buffers surrounding Threatened flora.

There are no Ramsar wetlands within the survey area or within 40 km of the survey area. There are no wetlands of national importance (ANCA Wetlands) within the survey area. The closest ANCA Wetland is the Lake Cronin Wetland System which is approximately 2.9 km to the northeast of the Crossroads survey area.

The survey area is not located within a gazetted conservation reserve. The northern part of the Crossroads survey area is approximately 350 m south of the Lake Cronin Nature Reserve (R36526). The Mt Hope survey area is approximately 13.3 km south of the Jilbadji Nature Reserve (R24049). The

2.6.1 Great Western Woodlands

The survey area lies within the Great Western Woodlands, considered by The Wilderness Society of WA to be of global biological and conservation importance as one of the largest and healthiest temperate woodlands on Earth, containing many endemic taxa. The region covers almost 16 million hectares (160,000 square kilometres), from the southern edge of the Western Australian Wheatbelt to the pastoral lands of the Mulga country in the north, the inland deserts to the northeast, and the treeless Nullarbor Plain to the east.

The Great Western Woodlands provides a connection between southwest forests and inland deserts (Gondwana Link) as well as linking the north-west passage to Shark Bay. The majority of the Great Western Woodlands is unallocated crown land (61.1%) with other interests including pastoral leases (20.4%), conservation reserves (15.4%) unallocated crown land, ex pastoral (2%) managed by the Department of Biodiversity, Conservation and Attractions (DBCA) and private land (approximately 1%).

No specific management strategy or formal conservation status applies to the Great Western Woodlands. The Great Western Woodlands currently includes towns, highways, roads, railways, private property, Crown Reserves, agricultural activities and mining tenements.

A map showing conservation values in relation to the survey area is provided in Figure 2-5 and Figure 2-6.

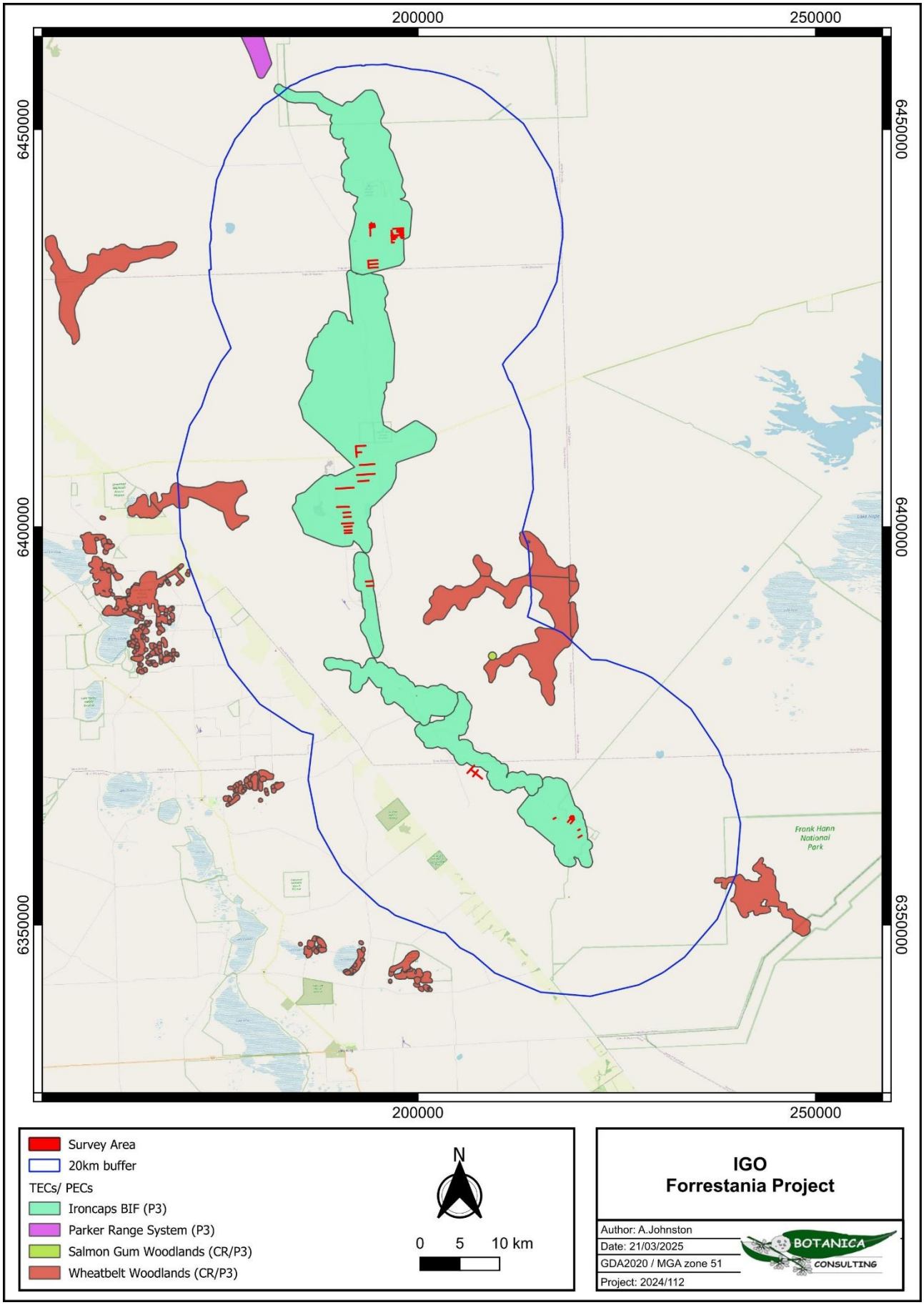


Figure 2-5: TECs/PECs in relation to the survey area

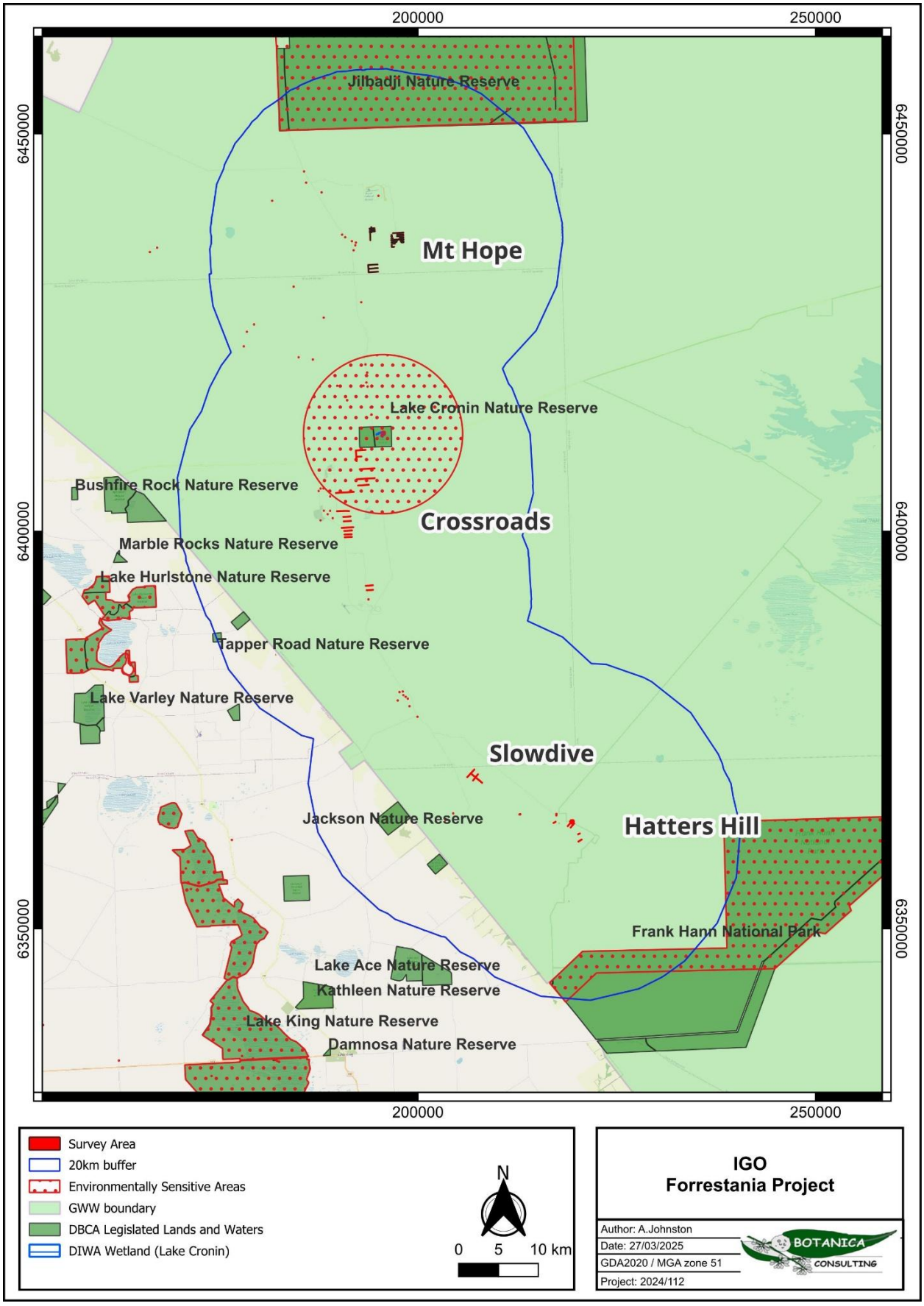


Figure 2-6: Conservation Values in relation to the Project and Survey Areas

2.7 Hydrology

According to the Geoscience Australia database (2015), there are no permanent/ perennial inland waters within the survey area. There are several minor ephemeral drainage lines which intersect with the survey area (Figure 2-7).

Groundwater Dependent Ecosystems (GDE) includes biological assemblages of species such as wetlands or vegetation that use groundwater either opportunistically or as their primary water source. For the purposes of this report, a GDE is defined as any vegetation community that derives part of its water budget from groundwater and must be assumed to have some degree of groundwater dependency. According to the BoM *Atlas of Groundwater Dependent Ecosystems* database (BoM, 2025b), there no known aquatic GDEs located within the survey area, yet there are several potential terrestrial GDEs located within each survey area (Table 2-3, Figure 2-7).

Table 2-3: Potential groundwater dependent ecosystems within the survey area (BoM, 2025b)

Survey Area	Type	Geomorphology	Ecosystem Description	Potential GDE Status
Mt Hope	Terrestrial GDE	Undulating plains with some sandplains, ferruginous breakaways; ridges of metamorphic rocks and granitic hills and rises; calcretes, large salt lakes and dunes along valleys.	Medium woodland; salmon gum and morrel.	Moderate
Crossroads	Terrestrial GDE	Undulating plains with some sandplains, ferruginous breakaways; ridges of metamorphic rocks and granitic hills and rises; calcretes, large salt lakes and dunes along valleys.	Medium woodland; salmon gum and morrel.	Moderate
Slowdive	Terrestrial GDE	Gently undulating surface of sandplains and ferruginous divides; stripped granitic slopes; and broad valley floors with salt lake chains.	Medium woodland; salmon gum	Moderate
	Terrestrial GDE	Gently undulating surface of sandplains and ferruginous divides; stripped granitic slopes; and broad valley floors with salt lake chains.	Shrublands; mallee scrub, *Eucalyptus eremophila.*	Low
Hatters	Terrestrial GDE	Gently undulating surface of sandplains and ferruginous divides; stripped granitic slopes; and broad valley floors with salt lake chains.	Medium woodland; salmon gum and morrel.	Moderate
	Terrestrial GDE	Gently undulating surface of sandplains and ferruginous divides; stripped granitic slopes; and broad valley floors with salt lake chains.	Mosaic: Medium woodland; salmon gum & red mallee / Shrublands; mallee scrub *Eucalyptus eremophila.*	Low

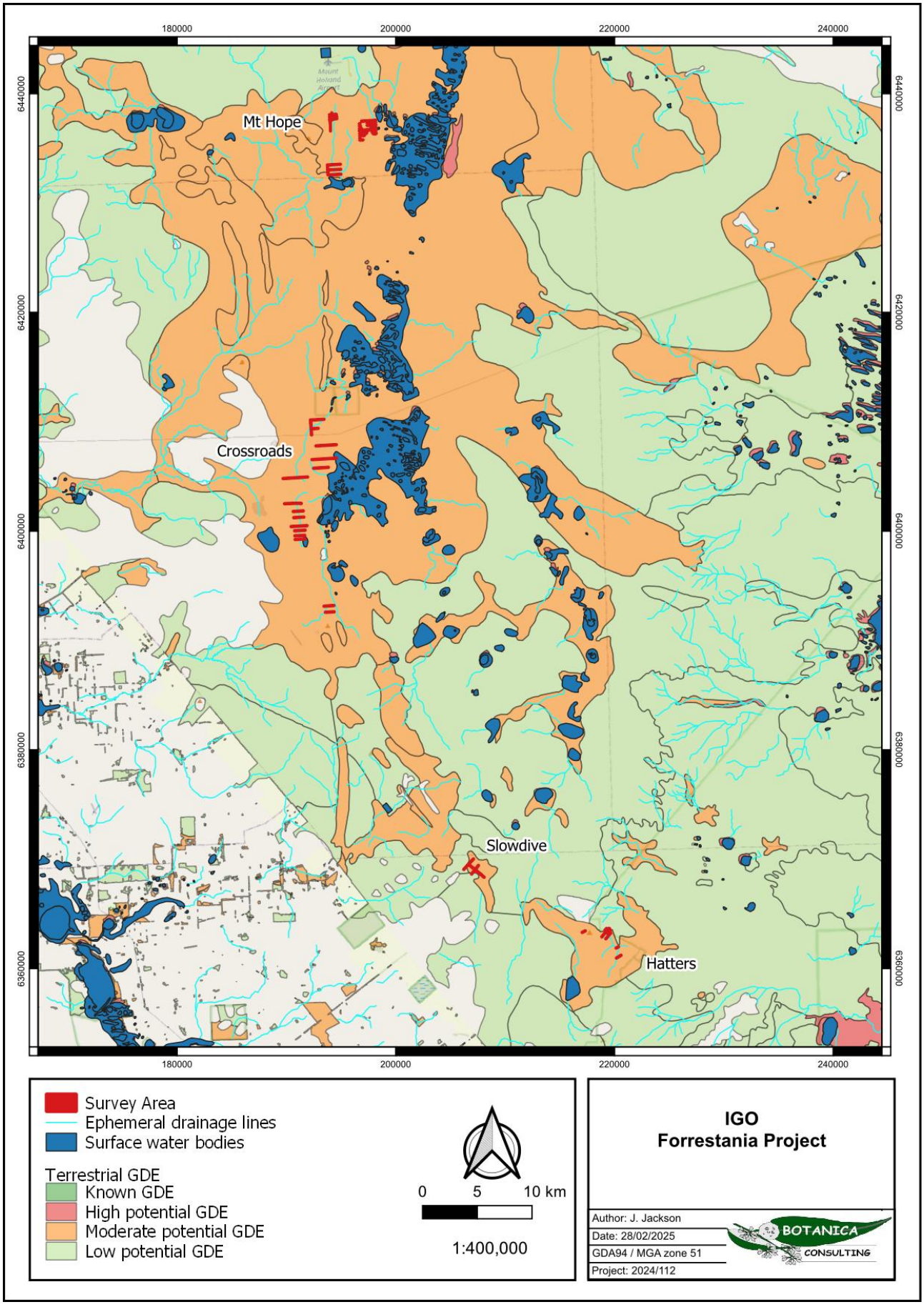


Figure 2-7: Regional Hydrology of the Survey Area

3 SURVEY METHODOLOGY

3.1 Desktop Assessment

3.1.1 Literature Review

A literature review was undertaken of previous flora and vegetation assessments conducted within the local region. Documents reviewed included:

- Botanica Consulting (2015). *Level 1 Flora and Vegetation Survey South Ironcap.* Prepared for Western Areas Limited, November 2010.
- Botanica Consulting (2020a). *Reconnaissance Flora and Basic Fauna Assessment.* Prepared on be alf of Forrestania Resources Ltd., October 2022.
- Botanica Consulting (2020b). *Targeted search for flora/ fauna and vegetation of conservation significance-Crossroads exploration program.* Prepared on behalf of Firefly Resources Ltd., January 2020.
- Botanica Consulting (2022). *Lady Lila Project: Targeted Flora and Basic Fauna Assessment*. Prepared on behalf of Forrestania Resources Ltd., October 2022.
- Botanica Consulting (2025). *South Ironcap Project: Flora and Fauna Assessment.* Unpublished report prepared for IGO Limited, February 2025.
- Ecoscape (2024). *Baseline Chuditch Population Survey.* Prepared on behalf of IGO Limited, October 2024.
- Gibson, N (2004). *Flora and vegetation of the Eastern Goldfield Ranges: Part 7. Middle and South Ironcap, Digger Rock and Hatter Hill*. Journal of the Royal Society of Western Australia, 87(2):49-62.
- Terratree (2022). *Detailed Flora and Vegetation Survey of Lady Lila project area.* Prepared on behalf of Forrestania Resources Ltd., February 2022.

3.1.2 Database Searches

Searches of the following databases were undertaken to aid in the compilation of a list of flora, vegetation and fauna taxa within the survey area:

- Department of Biodiversity, Conservation and Attractions (DBCA) Priority/ Threatened Flora Database Search-Reference ID 26-0325FL (DBCA, 2025a);
- DBCA Priority/ Threatened Fauna Database Search-Reference ID 14-0325FA (DBCA, 2025c);
- DBCA Priority/ Threatened Ecological Communities Database Search-Reference ID 08-0325EC (DBCA, 2025d); and

- Department of Climate Change, Energy the Environment and Water Protected Matters search tool (DCCEEW, 2025a).

The database searches were conducted for an area encompassing a 20 km buffer around the project area (i.e., the assessment area), which was a 20 km buffer as determined by DBCA.

Significant flora species identified by the desktop review were assessed with regards to their population extent and distribution and preferred habitat to determine their likelihood of occurrence within the survey area. The assessment categorised flora species as follows:

- **Unlikely:** Suitable habitat is not expected to occur and/or the survey area is outside the known range of the species.
- **Possible:** Suitable habitat may be present, and the area is within the known range of the species. This option is also used when there is insufficient information to determine the preferred habitat of a species.
- **Previously Recorded:** A record for this species is located within the survey area. Field survey Descriptions of conservation significant species and communities are provided in Appendix A.

Significant fauna species identified by the desktop review were assessed with regards to their distribution and preferred habitat to determine their likelihood of occurrence within the survey area. The assessment categorised fauna species as follows:

- **Would Not Occur:** There is no suitable habitat for the species in the survey area and/or there is no documented record of the species in the general area since records have been kept and/or the species is generally accepted as being locally/regionally extinct (supported by a lack of recent records).
- **Unlikely to Occur:** The survey area is outside of the currently documented distribution for the species in question, or no suitable habitat (type, quality and extent) was identified as being present during the field assessment. Individuals of some species may occur occasionally as vagrants/transients especially if suitable habitat is located nearby but the site itself would not support a population or part population of the species.
- **Possibly Occurs:** Survey area is within the known distribution of the species in question and habitat of at least marginal quality was identified as likely to be present during the field survey and literature review, supported in some cases by recent records being documented in literature from within or near the survey area. In some cases, while a species may be classified as possibly being present at times, habitat may be marginal (e.g., poor quality, fragmented, limited in extent) and therefore the frequency of occurrence and/or population levels may be low.

- **Known to Occur:** The species in question has been positively identified as being present (for sedentary species) or as using the survey area as habitat for some other purpose (for non-sedentary/mobile species) during field surveys within or near the survey area. This information may have been obtained by direct observation of individuals or by way of secondary evidence (e.g., tracks, foraging debris, scats). In some cases, while a species may be classified as known to occur, habitat may be marginal (e.g., poor quality, fragmented, limited in extent) and therefore the frequency of occurrence and/or population levels may be low.

It should be noted that these lists are based on observations from a broader area than the assessment area (20 km radius) and therefore may include taxa not present. The databases also often include very old records that may be incorrect or in some cases the taxa in question have become locally or regionally extinct. Information from these sources should therefore be taken as indicative only and local knowledge and information also needs to be taken into consideration when determining what actual species may be present within the specific area being investigated.

The conservation significance of flora and fauna taxa was assessed using data from the following sources:

- *Environment Protection and Biodiversity Conservation* (EPBC) *Act 1999*, administered by the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW); *Biodiversity Conservation* (BC) *Act 2016*, administered by the WA Government (DBCA);
- Red List produced by the Species Survival Commission (SSC) of the World Conservation Union (also known as the IUCN Red List – the acronym derived from its former name of the International Union for Conservation of Nature and Natural Resources). The Red List has no legislative power in Australia but is used as a framework for State and Commonwealth categories and criteria; and
- Priority Flora/ Fauna list. A non-legislative list maintained by DBCA for management purposes (Both updated January 2025).

The EPBC Act also requires the compilation of a list of migratory species that are recognised under international treaties including the:

- Japan Australia Migratory Bird Agreement 1981 (JAMBA)[1];
- China Australia Migratory Bird Agreement 1998 (CAMBA);
- Republic of Korea-Australia Migratory Bird Agreement 2007 (ROKAMBA); and

[1] Most but not all species listed under JAMBA are also specially protected under Specially Protected Species of the BC Act.

- Bonn Convention 1979 (The Convention on the Conservation of Migratory Species of Wild Animals).

Most but not all migratory bird species listed in the annexes to these bilateral agreements are protected in Australia as Matters of National Environmental Significance (MNES) under the EPBC Act. Descriptions of conservation significant species and communities are provided in Appendix A.

3.2 Field Assessment

Botanica conducted a reconnaissance flora/vegetation and basic fauna survey within the survey area from 6th to 9th November 2024. The survey area was traversed using a 4WD vehicle and on foot by Jim Williams (Director/Principal Botanist, Diploma of Horticulture) and Valentin Roure (Field technician).

A GPS track log of the survey effort is shown in Figure 3-1 to Figure 3-3.

3.2.1 Flora and Vegetation

The survey area is located in a fragmented landscape, it is not located within a conservation reserve or considered to be in a high biodiversity area, and the desktop assessment identified low potential for significant flora to be present. Apart from the presence of the TECs, other remaining native vegetation would potentially be considered widespread with common species making up the composition of communities, therefore a reconnaissance flora/vegetation survey was conducted.

Prior to the commencement of field work, aerial photography was inspected and obvious differences in the vegetation assemblages were identified. The different vegetation communities identified were then inspected during the field survey to assess their validity. A handheld GPS unit was used to record the coordinates of the boundaries between existing vegetation communities.

The Botanica team have been involved with several companies conducting numerous surveys in the Forrestania area since 2000. Jim has extensive knowledge of the flora of the region and has visited most of the known populations of Threatened flora in the area as well as discovering new populations of Priority and Threatened flora throughout the area.

The survey was conducted using a series of survey sites (relevés) as shown in Figure 3-1 to Figure 3-3. At each relevé site, the area was walked on foot to observe and record all flora species. The distance surveyed at each relevé varied dependent on the diversity/ variability of species and landforms/ vegetation types.

At each relevé, the following information was recorded:

- GPS location;

- Photograph of vegetation;
- Dominant taxa for each stratum;
- All vascular taxa (including annual taxa);
- Landform classification;
- Vegetation condition rating;
- Collection and documentation of unknown plant specimens; and
- GPS location, photograph and collection of flora of conservation significance (if encountered).

Unknown specimens collected during the survey were identified with the aid of samples housed at the Botanica Herbarium and Western Australian Herbarium. Vouchering of the specimens with the Western Australian Herbarium was not required as none of the specimens were of significance (i.e. conservation flora, novel taxa, range extensions etc.). A complete species list was generated from the relevé data for each of the vegetation types identified within the survey area (Appendix B).

Structural vegetation classification was used to characterise the different vegetation types. Vegetation types were described in accordance with NVIS classifications - Vegetation Types (Level V).

3.2.2 Terrestrial Fauna Field Assessment

3.2.2.1 Targeted and Opportunistic Surveys

During the course of all the survey work non-systematic opportunistic observations of fauna species were made and recorded. Secondary evidence of fauna such as tracks, diggings and scats were also noted. Active searches of fauna species were undertaken throughout the study area involved a series of transects across the study area during the day including observations of bird species with binoculars. Searches included but were not limited to investigating burrows, investigating scats, tracks and other traces, turning fallen timber and rocks, opening standing timber crevices, peeling bark and raking leaf litter.

Figure 3-1: GPS track log of the survey effort (Map 1/3)

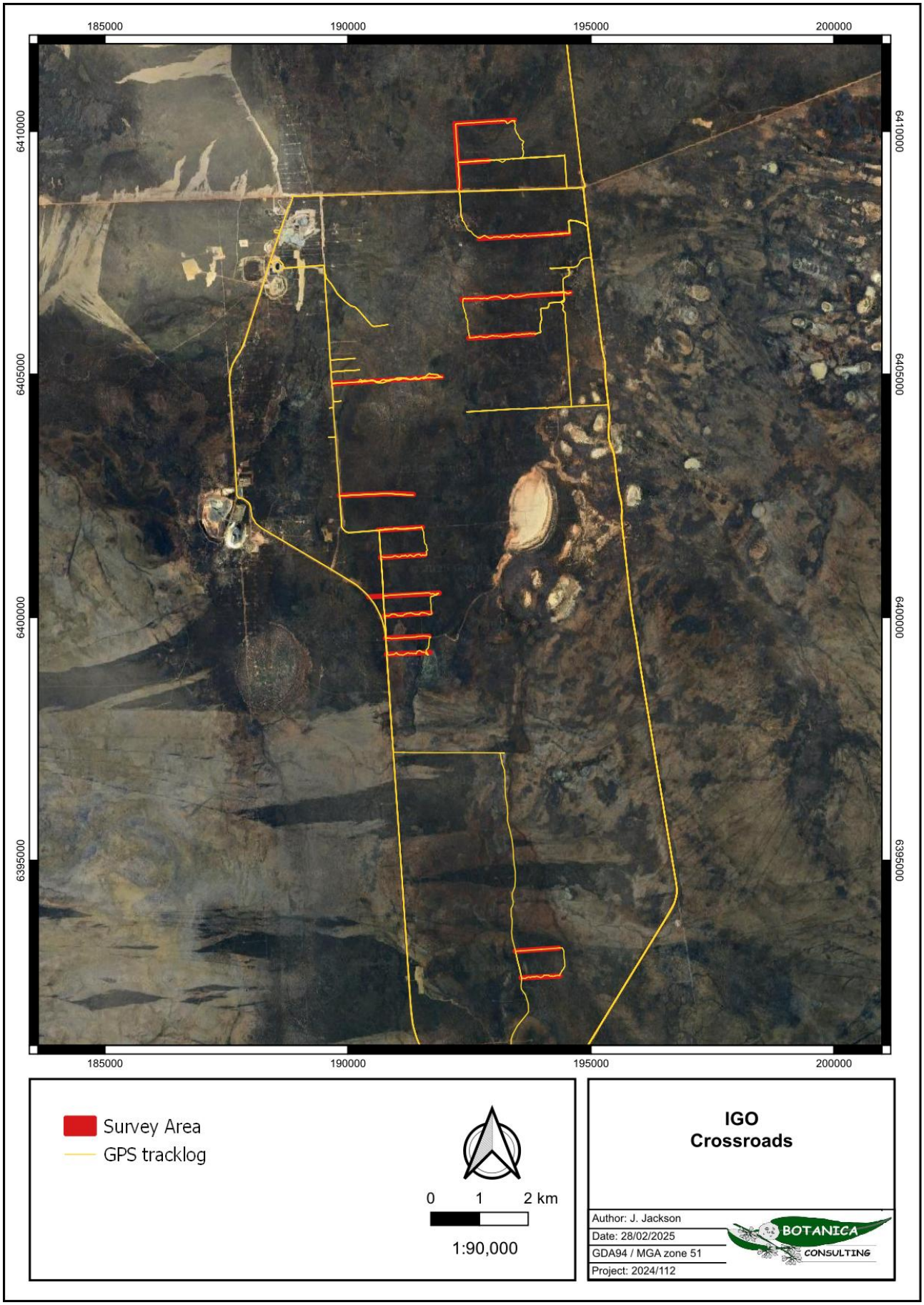


Figure 3-2: GPS track log of the survey effort (Map 2/3)

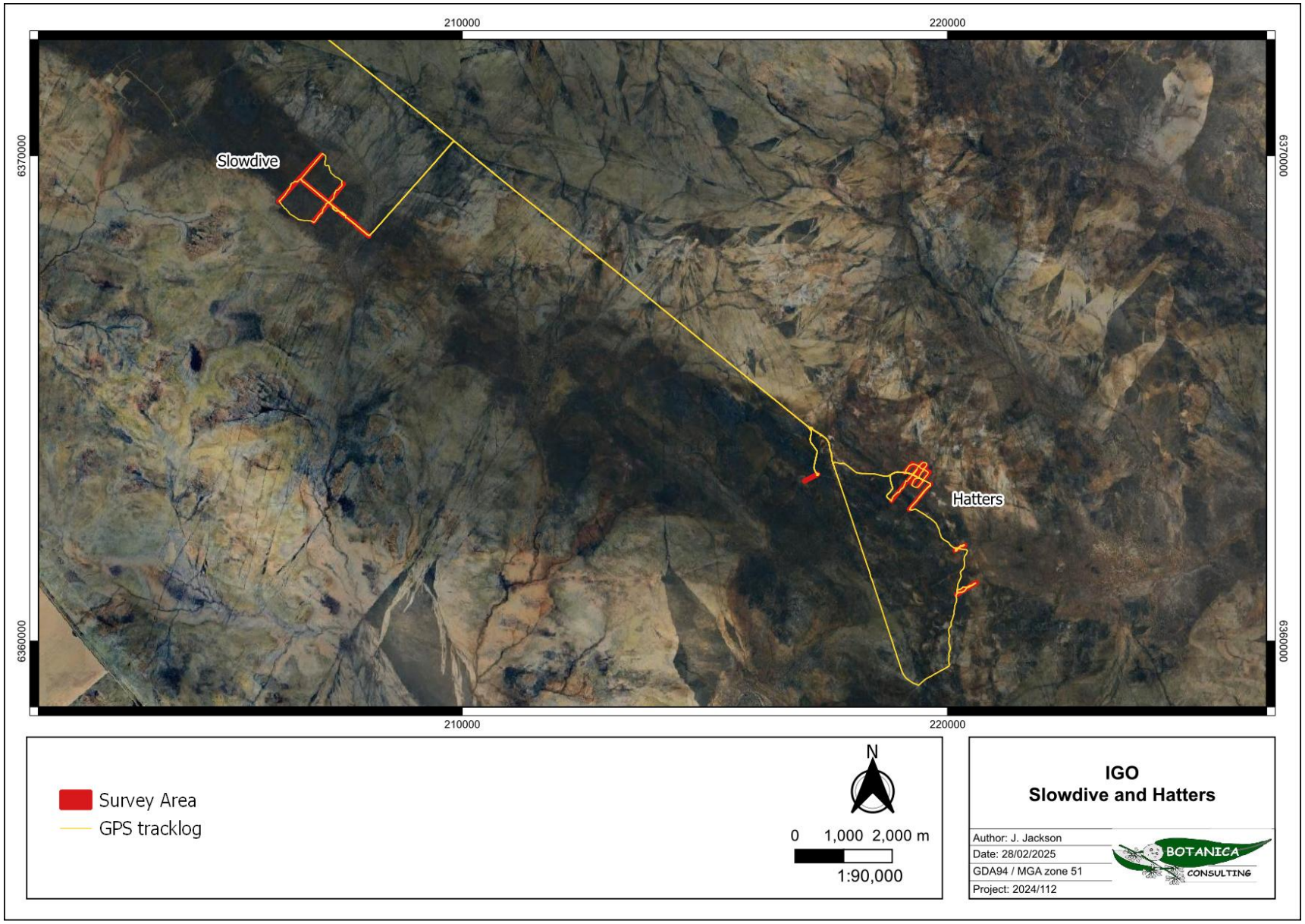


Figure 3-3: GPS track log of the survey effort (Map 3/3)

3.3 Data Analysis Tools

Following field assessments, vegetation types and condition were mapped using the GIS program QGIS, and the hectare area/ percentage area of each vegetation type and condition within the survey area was calculated. Spatial maps illustrating the location of vegetation types and any significant flora/ vegetation and fauna were generated using QGIS.

3.4 Scientific Licences

Table 3-1: Scientific Licenses of Botanica Staff Coordinating the Survey

Licensed Staff	Permit Number	Date of Expiry
Jim Williams	FB62000457 - Flora Taking (Biological Assessment) Licence	04/08/2025

3.5 Survey Limitations and Constraints

It is important to note that flora surveys will entail limitations notwithstanding careful planning and design. Potential limitations are listed in Table 3-2.

The conclusions presented in this report are based upon field data and environmental assessments and/or testing carried out over a limited period of time and are therefore merely indicative of the environmental condition of the site at the time of the field assessments. Also, it should be recognised that site conditions can change with time. Information not available at the time of this assessment which may subsequently become available may alter the conclusions presented.

Some species are reported as potentially occurring based on there being suitable habitat (quality and extent) within the survey area or immediately adjacent. The habitat requirements and ecology of many of the species known to occur in the wider area are however often not well understood or documented. It can therefore be difficult to exclude species from the potential list based on a lack of a specific habitats or microhabitats within the survey area. As a consequence of this limitation, the potential species list produced is most likely an overestimation of those species that actually utilise the survey area for some purpose.

In recognition of survey limitations, a precautionary approach has been adopted for this assessment. Any flora species that would possibly occur within the survey area (or immediately adjacent), as identified through ecological databases, publications, discussions with local experts/residents and the habitat knowledge of the author, has been listed as having the potential to occur.

Table 3-2: Limitations and Constraints Associated with the Flora/ Vegetation Survey

Variable	Potential Impact on Survey	Details
Access problems	Minor constraint	The survey was conducted via 4WD and on foot. Numerous access tracks were present within the survey area providing ease of access and good coverage of vegetation types.
Competency/ Experience	Not a constraint	The Botanica personnel that conducted the survey were regarded as suitably qualified and experienced. **Coordinating Staff**: Jim Williams (Director/ Principal Botanist, Diploma of Horticulture). **Data Interpretation**: Jennifer Jackson (Senior Environmental Consultant, BSc. Env. Mgmt (Hons)), Jim Williams.
Timing of survey, weather & season	Not a constraint	Fieldwork was undertaken in November 2024, during the EPA's recommended primary survey period for the Southwest and Interzone Province (i.e., Spring, September to November).
Area disturbance	Not a constraint	The majority of the area has not been cleared, these areas were mostly intact and comprised of native vegetation.
Survey Effort/ Extent	Not a constraint	Survey intensity was appropriate for the size/ significance of the area with a reconnaissance flora/ vegetation survey and targeted fauna survey completed to identify vegetation types/ fauna habitats.
Availability of contextual information at a regional and local scale	Not a constraint	Conservation significant flora database searches provided by the DBCA were used to identify any potential locations of Threatened/Priority flora species. BoM, DWER, DPIRD, DBCA and DCCEEW databases were reviewed to obtain appropriate regional desktop information on the biophysical environment of the local region. Botanica has conducted numerous surveys within the Forrestania area and was also able to obtain information about the sites from previous research conducted within the area. Results of previous assessments in the local area were reviewed to provide context on the local environment.
Completeness	Not a constraint	In the opinion of Botanica, the survey area was covered sufficiently in order to identify vegetation assemblages. Survey work was conducted during the EPAs recommended timing (Spring). Most taxa were flowering and all taxa were able to be identified to species level. The vegetation associations for this study were based on visual descriptions of locations in the field. The distribution of these vegetation associations outside the study area is not known, however vegetation associations identified were categorised via comparison to vegetation distributions throughout WA given on NVIS (DotEE, 2017).

4 RESULTS

4.1 Desktop Assessment

4.1.1 Flora

The NatureMap database search (DBCA, 2025b) identified 1,265 vascular flora species as occurring within 20 km of the survey areas. The full list of vascular flora identified by the desktop search is contained in

4.1.1.1 Significant Flora

The results of the literature review, search of the DBCA's Threatened and Priority Flora database, NatureMap search, and MNES search indicated that one Threatened Flora taxa have previously been recorded within the survey area. *Eucalyptus steedmanii* is listed as Vulnerable under the EPBC Act and BC Act and has an extent of disturbance of 83.6 km^2 (DCCEEW, 2025b). A drill line at the crossroads intercepts a population of *E. steedmanii,* however this is an historical record from 1978 (Figure 4-2). 154 Threatened or Priority flora have previously been recorded within 20 km of the survey area.

The locations of DBCA database records for Significant Flora in relation to the survey area is shown in Figure 4-1.

The 154 Threatened and Priority taxa that were identified to occur within 20 km of the survey area were assessed for distribution and known habitat to determine their likelihood of occurrence within the survey area, 153 of these were determined as possible to occur or known to occur in the survey area and one is presumed extinct (Table 4-2).

4.1.1.2 Introduced Flora

The desktop review identified 52 introduced flora (weed) species as potentially occurring within 50 km of the survey area. Of these, one is listed as Declared Pests on the Western Australian Organism List (WAOL) under the *Biosecurity and Agriculture Management Act 2007* (BAM Act), and one is listed as a Weed of National Significance (WoNS).

A summary of the potentially occurring Declared Pests and WoNS occurring within 40 km of the survey area are listed in Table 4-1.

The full list of potential weed species occurring within 40 km of the survey area is contained in Appendix J.

Table 4-1: Potentially occurring Declared Pests and WoNS within 50 km of the survey area

Family	Taxon	Common Name	WAOL Status	WoNS
Asteraceae	*Chondrilla juncea*	Skeleton Weed	Declared Pest - s22(2)	No
Solanaceae	*Lycium ferocissimum*	Coral Cactus, Boxing Glove Cactus		Yes

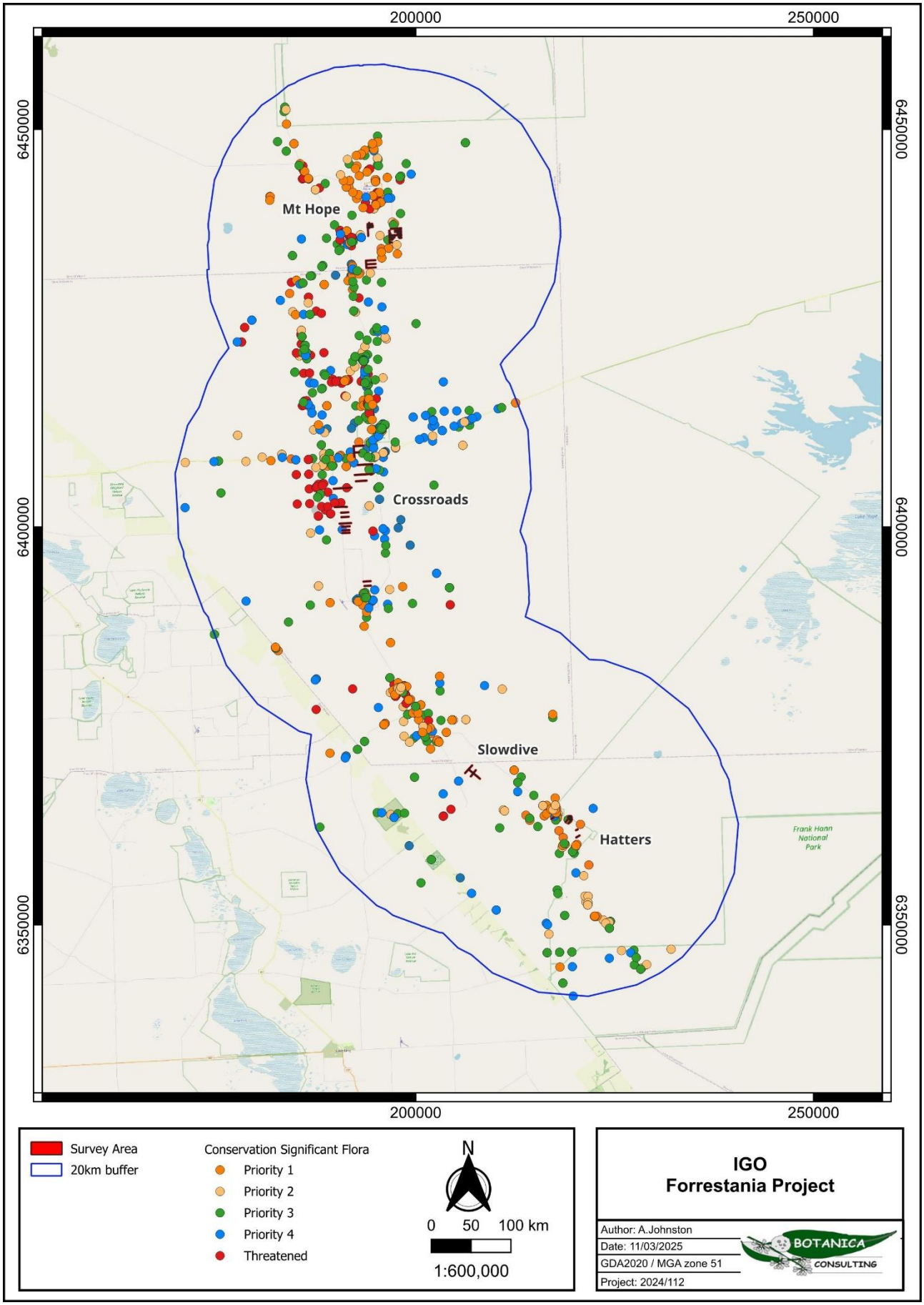


Figure 4-1: Significant Flora Records in relation to the Survey Area

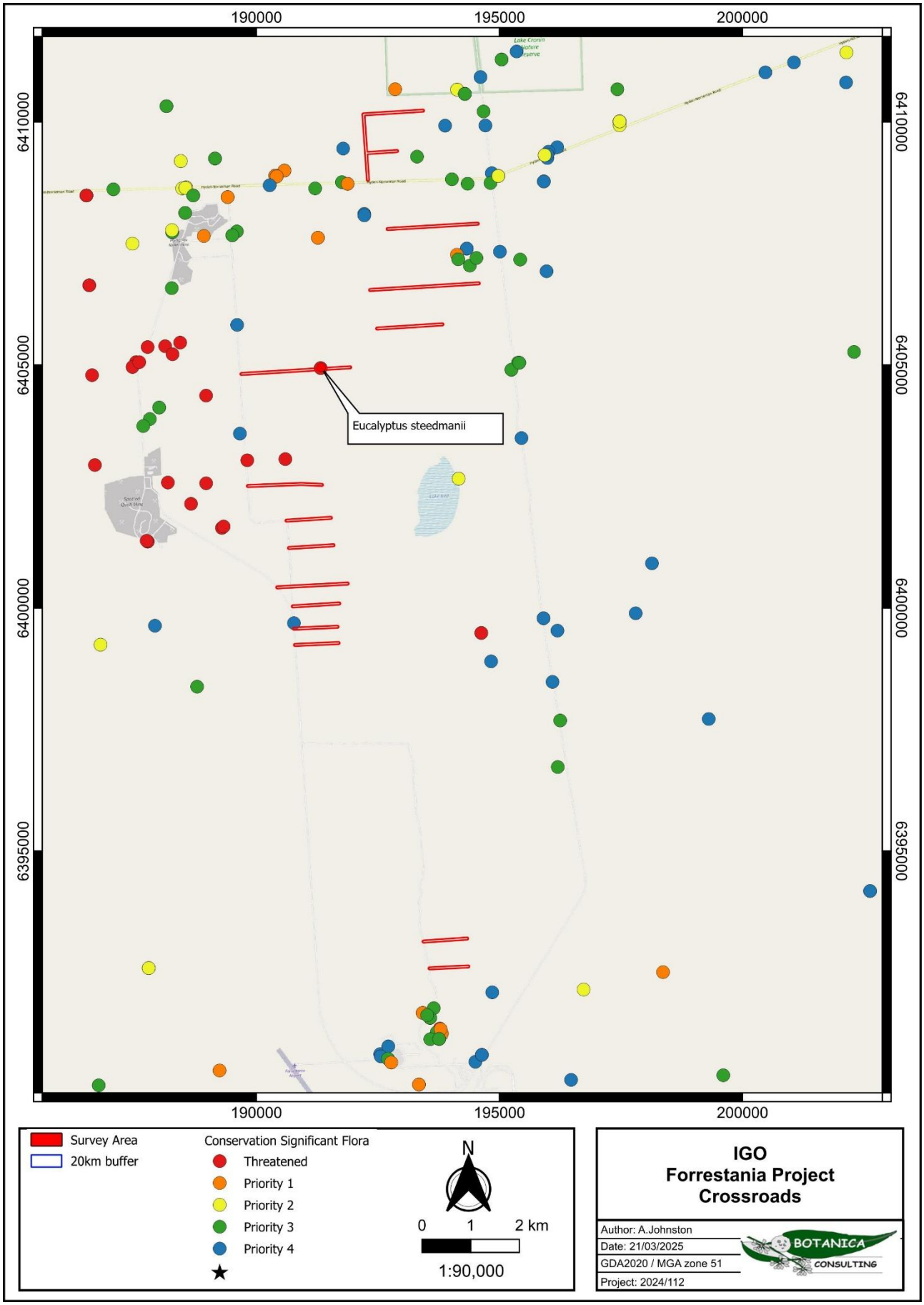


Figure 4-2: Previous record of *Eucalyptus steedmanii* within the Crossroads survey area

Table 4-2: Significant Flora Potentially Occurring within the Survey Area

Taxon	Conservation Status			Habitat Description (WA Herbarium, 1998-)	Likelihood of Occurrence
	EPBC Act	BC Act	DBCA		
Acacia asepala			2	Red-brown sandy loam. Undulating plains, along drainage lines.	Possible
Acacia dissona var. indoloria			3	Sand, sandy loam. Undulating plains.	Possible
Acacia heterochroa subsp. robertii			2	Gravelly lateritic soils. Hilltops & ridges.	Possible
Acacia kerryana			2	Granitic loamy sand, stony clayey loam or clayey sand. Low stony ridges, undulating plains.	Possible
Acacia lachnocarpa			1	Orange/ Grey/ Brown sandy clay soils on flats and slopes. Near/ on granite outcrops.	Possible
Acacia lanuginophylla	EN	T		White/grey sand, clayey sand, gravelly soils. Flats, along drainage lines.	Possible
Acacia repanda			3	Loam, sandy or gravelly loam. Near granite outcrops.	Possible
Acacia sedifolia subsp. pulvinata			3	Gravelly sand or clay. Laterite hills, gravelly ridges.	Possible
Acacia singula			3	Gravelly sand over laterite, white or yellow sand. Rises, hilltops.	Possible
Acacia sp. Forrestania (D. Angus DA 3001)			1	Lateritic orange-red clay soils on flats and lower slopes.	Possible
Acacia tetraneura			1	White/yellow sand, sandy loam or clay, laterite, clay loam. Plains, flats, low rocky rises.	Possible
Acacia undosa			3	Sandy clay loam, clayey sand. Undulating plains, low-lying areas.	Possible
Anticoryne melanosperma			3	Flat, yellow sandy clay over unknown.	Possible
Austrostipa everettiana			1	Flat, open aspect. Red-brown sandy loam.	Possible
Austrostipa turbinata			3	Gently inclined crest of basalt, greenstone with some calcrete with brown shallow sandy clay loam soils.	Possible
Balaustion grandibracteatum subsp. junctura			2	Undulating plain. Orange sandy clay loam with lateritic gravel.	Possible
Balaustion grandibracteatum subsp. juncturum			2	Gentle slope with yellow- brown silty sand and granite.	Possible
Balaustion grandibracteatum subsp. meridionale			2	Gently undulating plain. Yellow sand with scattered gravel.	Possible

Taxon	Conservation Status			Habitat Description (WA Herbarium, 1998-)	Likelihood of Occurrence
	EPBC Act	BC Act	DBCA		
Balaustion sp. North Ironcap (R.J. Cranfield 10580)			1	Gently undulating sandplain.	Possible
Balaustion thamnoides			2	Gently undulating plain. Orange sandy loam.	Possible
Banksia dolichostyla	VU	VU	T	Laterite gravel hill.	Possible
Banksia epimicta			2	Sandy loam, white sand.	Possible
Banksia lullfitzii			3	Yellow sand. Sandplains.	Possible
Banksia rufa subsp. flavescens			3	Sandy loam or sand with gravel.	Possible
Banksia viscida			3	Gravelly soils. Lateritic rises.	Possible
Banksia xylothemelia			3	Sandy loam, usually over laterite. Sandplains.	Possible
Bentleya diminuta			2	Sandy clay or loam with calcareous nodules.	Possible
Beyeria opaca			1	Red sandy clay. Dunes, slopes.	Possible
Boronia revoluta	EN	VU	T	Stony sandy loam or sand. Plains, hillsides & summits.	Possible
Boronia ternata var. promiscua			3	Yellow sandy clay, laterite. Mallee, heath.	Possible
Bossiaea atrata			3	White sand or sandy loam over laterite or clay, quartzite sand, clay.	Possible
Brachyloma nguba			1	White to brown sandy clay, shallow sandy loam. Open mallee woodland, mallee scrub, flat plains.	Possible
Brachyloma stenolobum			1	Plain. Dry, bare yellow sandy loam.	Possible
Caladenia graniticola	EN			Gritty sandy clay, granite. Near low exposed rock outcrops.	Possible
Caladenia hoffmanii	EN			Clay, loam, laterite, granite. Rocky outcrops and hillsides, ridges, swamps and gullies.	Possible
Calectasia pignattiana	VU			Sand to sandy clay over granite or laterite, gravel. Plains and gentle slopes.	Possible
Calytrix nematoclada			3	Yellow or grey sand. Sandplains.	Possible
Chamelaucium sp. King Ingram (G. Grigg WB40916)			1	Shallow yellow sand over laterite gravel.	Possible
Chamelaucium sp. Mount Holland (G. Cockerton & G. Grigg WB40918)			1	Lower in landscape on gravelly sand.	Possible

Taxon	Conservation Status			Habitat Description (WA Herbarium, 1998-)	Likelihood of Occurrence
	EPBC Act	BC Act	DBCA		
Chorizema circinale			3	Yellow sand, sandy clay with gravel. Flats, margin of gravel pit.	Possible
Comesperma calcicola			3	Calcareous or semi-saline clay loams, limestone. Areas around saline water.	Possible
Conospermum sigmoideum			2	Yellow sand.	Possible
Cryptandra exserta			1	Sandy soil with laterite gravel, red sand over clay. Gentle mid-slopes, plains.	Possible
Cryptandra polyclada subsp. polyclada			3	Sand. Sandplains.	Possible
Cyanothamnus westringioides			2	Undulating plain. Yellow sand.	Possible
Dampiera orchardii			2	Sand.	Possible
Dampiera scaevolina			1	Sandy & gravelly soils.	Possible
Daviesia implexa			3	Plain, yellow-white sandy clay.	Possible
Daviesia newbeyi			3	Sand or sandy clay over granite. Rocky slopes.	Possible
Dicrastylis capitellata			1	Loamy sand, sandy loam.	Possible
Dielsiodoxa leucantha subsp. leucantha			3	Well-drained sandy loam. Moderately exposed, small kaolinite breakaway.	Possible
Elatine macrocalyx			3	Shallow sands over clay. Margins of playa lakes and clay pans.	Possible
Eremophila biserrata			4	Sandy or sandy clay soils. Alluvial flats, salt flats & lakes.	Possible
Eremophila inflata			4	Brown-yellow sandy loam.	Possible
Eremophila subteretifolia	EN			Grey sand, loam. Edges of salt lakes, sub-saline flats.	Possible
Eremophila racemosa			4	Sandy or stony loam, clay loam. Undulating plains, roadsides.	Possible
Eremophila verticillata	EN		T	Clay loam, loam over limestone.	Possible
Eucalyptus cerasiformis			4	Red loamy soils.	Possible
Eucalyptus deflexa			4	Clay loam, sandy loam, white or yellow sand, often with gravel. Flat areas & slight rises.	Possible
Eucalyptus eremophila subsp. pterocarpa			1	Sandy or clay loam.	Possible

Taxon	Conservation Status			Habitat Description (WA Herbarium, 1998-)	Likelihood of Occurrence
	EPBC Act	BC Act	DBCA		
Eucalyptus exigua			3	Sandy loam, white sand. Sandplains.	Possible
Eucalyptus georgei subsp. fulgida			4	Sandy loam, clayey sand. Slight depressions.	Possible
Eucalyptus polita subsp. ocreata			3	Brown sand over clay. Flat.	Possible
Eucalyptus polita subsp. polita			3	Gently inclined lower slope of basalt, quartz, iron enriched fragments and metasediments with red-brown shallow sandy clay loam soils.	Possible
Eucalyptus recta	EN			Sandy laterite.	Possible
Eucalyptus rugulata			4	Orange laterite gravel. Summits, gentle upland slopes.	Possible
Eucalyptus steedmanii	VU	VU	T	Gravelly loam over ironstone, sand. Low hills, undulating plains.	Known to Occur
Eucalyptus urna subsp. xesta			3	Level simple/lower slope of laterite, weathered mafic sediment, mixed metasediments and minor iron enrichment with brown shallow sandy loam soils.	Possible
Euchilus daena			3	Well-drained clayey sand. Moderately exposed, gentle undulating plain.	Possible
Eutaxia acanthoclada			3	Light brown sandy clay, shallow sandy loam, red clay over banded ironstone, gravel. Gently undulating plains.	Possible
Eutaxia hirsuta			2	Gently undulating sandplain. Yellow-beige sand.	Possible
Eutaxia lasiocalyx			2	Red sandy loam, laterite and quartz gravel. Gentle lower slopes.	Possible
Eutaxia nanophylla			3	Clayey sand, red clay, stoney clayey loam. Low-lying areas, damp flats, slopes, undulating plains, low stony ridges.	Possible
Eutaxia rubricarina			3	Gravelly sand, grey to pinkish-white sandy clay, red loam. Flats, slopes, valley floors, road verges.	Possible
Eutaxia sp. North Ironcap (P. Armstrong PA 06/898)			1	Undulating plain. Red sandy clay loam.	Possible
Frankenia drummondii			3	Sand. Lake edges.	Possible
Gastrolobium cruciatum			3	Sand & clayey sand with gravel, rocky loams, laterite. Flats, gently undulating areas.	Possible
Gastrolobium tenue			1	Sand & clayey sand with gravel, rocky loams, laterite. Flats, gently undulating areas.	Possible

Taxon	Conservation Status			Habitat Description (WA Herbarium, 1998-)	Likelihood of Occurrence
	EPBC Act	BC Act	DBCA		
Grevillea aneura			4	Sand, sandy clay, gravel.	Possible
Grevillea insignis subsp. elliotii			3	Gravelly sand or loam over ironstone. Hilltops or rises.	Possible
Grevillea lullfitzii			1	Lateritic soils, shallow soils on granite.	Possible
Grevillea marriottii			1	Yellow or white sand over laterite. On rises or on tops of lateritic cappings.	Possible
Grevillea neodissecta			4	Level upper slope of banded ironstone, ironstone, weathered ironstone and mixed metasediments. Slightly rocky banded ironstone outcrop with yellow-brown shallow sandy loam soils.	Possible
Grevillea pilosa subsp. redacta			3	Sandy soils with lateritic gravel.	Possible
Grevillea prostrata			4	White, grey or yellow sand, gravel. Sandplains.	Possible
Guichenotia asteriskos			2	Sandy clay or loam with gravel.	Possible
Gyrostemon ditrigynus			4	Sand, sandy clay, loam. Plains, low ironstone ridges.	Possible
Haegiela tatei			4	Clay, sandy loam, gypsum. Saline habitats.	Possible
Hakea pendens			3	Stony loam. Ironstone ridges.	Possible
Halgania sp. Peak Eleanora (M.A. Burgman 3547 B)			2	Loamy sand. Undulating plains.	Possible
Hemigenia sp. Newdegate (E. Bishop 75)			1	Clay loam. Disturbed sites.	Possible
Hibbertia arenicola			2	Gently undulating plain. Brown loamy sand.	Possible
Hibbertia axillibarba			1	Lateritic soil. Ranges.	Possible
Hibbertia carinata			1	Well-drained gravelly sand, yellow sand with gravel.	Possible
Hibbertia hapalophylla			1	Fine white siliceous sand over laterite gravel. Slope: flat.	Possible
Hibbertia pachyphylla			3	White to yellow sand, brown sandy gravel, gravelly loam, laterite, granite, quartz. Undulating plains, low rises, valley floors.	Possible
Hibbertia sp. Mount Gibbs (G.F. Craig 6668-1)			2	Gently undulating plain. Yellow loamy sand.	Possible
Hibbertia tuberculata			1	Clay-loam covered in rocks and stones.	Possible
Hydrocotyle eichleri			3	Moderately-drained, sub-saline sandy clay. Margin of small salt lake.	Possible

Taxon	Conservation Status			Habitat Description (WA Herbarium, 1998-)	Likelihood of Occurrence
	EPBC Act	BC Act	DBCA		
Hysterobaeckea pterocera			1	Low stony ridge. Orange loam.	Possible
Isoetes brevicula			3	Submerged in rock pools on granitic outcrops.	Possible
Isolepis australiensis			3	Silty sand, sandy clay. Lake margins, pools.	Possible
Jennata indira subsp. monstrosita			3	Slight elevation, dry grey, brown sandy clay.	Possible
Labichea rossii			1	Banded ironstone ridge with red brown sandy loam.	Possible
Lepidobolus spiralis			2	Yellow sand. Dry kwongan.	Possible
Lepidosperma amantiferrum			1	Yellow sandy loam with banded ironstone gravel and rocks. Gentle lower slopes.	Possible
Lepidosperma ferriculmen			1	Well-drained orange-red sandy loam with banded ironstone gravel and rocks. Stony slopes.	Possible
Levenhookia pulcherrima			3	Variable-drained, shallow, loamy arkosic sand. Moderately exposed apron peripheral to small granite exposure. In Granite Complex.	Possible
Logania nanophylla			2	White sand, pebbly calcareous sandy clay. Sand dunes.	Possible
Melaleuca agathosmoides			1	Gravelly red clay loam. Hills.	Possible
Melaleuca macronychia subsp. trygonoides			3	Sandy soils. Granite outcrops.	Possible
Microcorys elatoides			1	Light orange/brown gravelly soil.	Possible
Microcorys sp. Forrestania (V. English 2004)			4	Yellow sandy clay or red-brown clay. Open woodland or cleared areas.	Possible
Microcorys sp. Mt Holland broad-leaf (G. Barrett s.n. PERTH 04104927)			1	Reddish yellow clayey sand over laterite.	Possible
Microcorys sp. Parker Range (C. Hancock s.n. PERTH 09215123)			2	Upper gentle slope, ironstone gravel, light brown sandy clay.	Possible
Mirbelia densiflora			3	Stony loam, loamy sand. Small ridges, breakaways, undulating plains.	Possible
Mirbelia taxifolia			1	Red or yellow sand.	Possible
Notisia intonsa			3	Moderately exposed slope, well drained crumbly red clay.	Possible
Olearia laciniifolia			2	White sand. Around playa lakes.	Possible
Orianthera exilis			2	Red-brown loam/clay/gravel.	Possible

Taxon	Conservation Status			Habitat Description (WA Herbarium, 1998-)	Likelihood of Occurrence
	EPBC Act	BC Act	DBCA		
Oxymyrrhine plicata			3	Sandy soil.	Possible
Paragoodia crenulata			T	Low plain. Brown-grey loam/gravel over laterite.	Possible
Persoonia cymbifolia			3	On flats or in rock crevices.	Possible
Phebalium brachycalyx			3	Sand, gravelly soils. Lateritic uplands, hills.	Possible
Phebalium pauciflorum subsp. grande			1	Well-drained loam. Moderately exposed, small kaolinitic breakaway.	Possible
Phebalium sp. Mt Gibbs (G.F. Craig 6658)			1	Gently undulating plain. Yellow-brown fine loamy sand with scattered pea-gravel.	Possible
Pityrodia scabra subsp. dendrotricha			3	Flat. Dry brown sand/gravel.	Possible
Pterostylis echinulata			3	Clay depression.	Possible
Pterostylis elegantissima			1	Yellow sand.	Possible
Ricinocarpos trichophorus	EN			Sandy clay, loam. Breakaways, among sandstone rocks.	Possible
Rinzia fimbriolata			1	Rocky slope, red-brown sandy/clay/gravel.	Possible
Rinzia torquata			3	Low laterite ridge. Orange loam.	Possible
Roycea pycnophylloides	EN			Sandy soils, clay. Saline flats.	Possible
Scaevola tortuosa			1	Sandy clay. Margins of salt lakes.	Possible
Seringia adenogyna			3	Low plain. Red sandy loam over laterite-ironstone.	Possible
Stackhousia muricata subsp. Perennial (W.R. Barker 3641)			3	Flat plain, red loam with influence of nearby greenstone low rise.	Possible
Stenanthemum bremerense			4	Orange-brown sandy loam, orange-red gravelly loam, skeletal red loam, laterite, ironstone. Top or sides of outcrops and breakaways.	Possible
Stenanthemum liberum			1	Yellow sandy loam over laterite.	Possible
Stylidium sejunctum			3	Clayey sand or loam, laterite. Outcrops, upper slopes, breakaways. Mallee and Allocasuarina shrubland.	Possible
Stylidium validum			1	Clayey sand or loam, ironstone, greenstone gravel. Hillslopes and hilltops. Eucalypt woodland, mallee shrubland.	Possible
Styphelia anomala			2	Undulating plain. Dry, yellow sandy loam over laterite.	Possible

Taxon	Conservation Status			Habitat Description (WA Herbarium, 1998-)	Likelihood of Occurrence
	EPBC Act	BC Act	DBCA		
Styphelia platyneura			2	Lowerslope. Red-brown sandy loamy gravel over ironstone.	Possible
Styphelia subglauca			3	Yellow/ Orange sandy loam on a flat/ slope of laterite and ironstone.	Possible
Synaphea tripartita			3	Lateritic gravel, clay.	Possible
Tetratheca aphylla subsp. megacarpa	VU	VU	T	Yellow sand, brown sandy loam, yellow-brown clay loam, gravel, laterite. Rises and ridges.	Possible
Teucrium diabolicum			3	Flat, red-brown clay.	Possible
Thomasia gardneri			X	The details of its habitat are not known.	Presumed extinct
Thryptomene jilbadji			1	Flat, red-orange sand/loam/clay/gravel.	Possible
Thryptomene salina			2	Flat, red-orange sand/loam/clay/gravel.	Possible
Verticordia gracilis			3	Yellow sand, gravelly sand, sandy loam.	Possible
Verticordia multiflora subsp. solox			2	Plain, rangeland. Dry, yellow sandy clay.	Possible
Verticordia staminosa var. cylindracea	EN			Soil pockets. Granite outcrops.	Possible
Verticordia stenopetala			3	Yellow sand, sometimes with gravel. Undulating plains.	Possible
Thysanotus lavanduliflorus			3	Sand, sandy loam.	Possible

4.1.2 Fauna

The NatureMap database search (DBCA, 2025b) identified a total of 287 terrestrial vertebrate fauna taxa within 20 km of the survey area, consisting of 172 bird, 34 mammal, 71 reptile, and 10 amphibian taxa. The full list of vertebrate fauna identified by the desktop search is contained in Appendix F.

4.1.2.1 Conservation Significant Fauna

The desktop review identified 18 terrestrial fauna species of conservation significance as previously being recorded within 20 km of the survey area. Eleven of these are listed as Threatened under Federal and/or State legislation, one is listed as Other Specially Protected. Six are listed as Priority under State legislation. The EPBC Protected Matters search also identified six migratory bird species, 2 of which are threatened. Habitat and distribution data was used to determine the likelihood of occurrence within the survey area (Table 4-4). Five of these records are within the survey area, including a Western Quoll, Carnaby's cockatoo, two Malleefowl and a Western Brush Wallaby. The desktop assessment identified 13 of these fauna as possibly occurring or moving through the survey area (Table 4-4).

4.1.2.2 Introduced Fauna

The desktop review identified five introduced vertebrate fauna (feral) species as potentially occurring within 50 km of the survey area (Table 4-3).

Table 4-3: Potentially occurring introduced fauna within 50 km of the survey area

Family	Taxon	Common Name
Canidae	*Canis familiaris*	Dingo, Dog
Canidae	*Vulpes vulpes*	Fox
Felidae	*Felis catus*	Domestic Cat
Leporidae	*Oryctolagus cuniculus*	Rabbit
Muridae	*Mus musculus*	House Mouse

Table 4-4: Potentially occurring significant fauna

Class	Taxon	Conservation Status			Habitat Description	Likelihood of Occurrence
		EPBC Act	BC Act	DBCA		
Aves	Carnaby's cockatoo *Zanda latirostris*	EN	EN		Carnaby's Cockatoo is endemic to, and widespread in, the south-west of Western Australia. Breeding habitat consists of woodland or forest. Nest in hollows in live or dead trees of salmon gum (*E. salmonophloia*), wandoo, tuart, jarrah (*E. marginata*), flooded gum (*E. rudis*), york gum (*E. loxophleba subsp. loxophleba*), powderbark (*E. accedens*), karri and marri (DCCEEW, 2025c).	Possibly occurs. Observed overhead during previous field surveys. Within known range, however habitat appears marginal/or unsuitable for breeding.
	Curlew sandpiper *Calidris ferruginea*	CR / MI	CR		Inland, where they are rarely seen, around ephemeral and permanent lakes, dams, waterholes and bore drains, usually with bare edges of mud or sand (DCCEEW, 2025c).	Unlikely to Occur
	Grey Falcon, Falco hypoleucos	VU	VU		Occurs in arid and semi-arid Australia. The species is mainly found where annual rainfall is less than 500 mm, except when wet years are followed by drought, when the species might become marginally more widespread, although it is essentially confined to the arid and semi-arid zones at all times. The species frequents timbered lowland plains, particularly acacia shrublands that are crossed by tree-lined water courses (DCCEEW, 2025c).	Possibly occurs aerially over survey area on very rare occasions. No suitable breeding habitat.
	Hooded plover, Hooded dotterel *Charadrius cucullatus*			P4	Ocean sandy beaches and coastal lakes (ALA, 2025)	Would Not Occur
	Malleefowl *Leipoa ocellata*	VU	VU		Occurs in unburned mallee and woodland with abundant litter and low scrub (DCCEEW, 2025c).	Known to occur. Within known range, suitable habitat likely to be present and multiple previous DBCA records within the survey area.

Class	Taxon	Conservation Status			Habitat Description	Likelihood of Occurrence
		EPBC Act	BC Act	DBCA		
	Migratory Shorebirds*	MI	MI		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 salt lakes inland (DCCEEW, 2025c).	Would not occur. No suitable habitat.
	Night Parrot, Pezoporus occidentalis	EN	CR		Broad habitat requirements include areas of old-growth spinifex (Triodia) for roosting and nesting, together with foraging habitats that are likely to include various native grasses and herbs and may or may not contain shrubs or low trees. (DBCA, 2024).	Would not occur. No documented records in the region and no suitable habitat.
	Peregrine Falcon *Falco peregrinus*		OS		The Peregrine Falcon is found in most habitats, from rainforests to the arid zone, and at most altitudes, from the coast to alpine areas. It requires abundant prey and secure nest sites and prefers coastal and inland cliffs or open woodlands near water and may even be found nesting on high city buildings (Birdlife Australia, 2024).	Possibly occurs. Survey area may form part of larger home range but unlikely to breed in area.
	Sharp-tailed sandpiper *Calidris acuminata*	VU/MI	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 (DCCEEW, 2025c).	Would Not Occur. No suitable habitat.
	Southern Whiteface, Aphelocephala leucopsis	VU			Occur across most of mainland Australia south of the tropics, Southern Whitefaces live in a wide range of open woodlands and shrublands where there is an understorey of grasses or shrubs, or both (DCCEEW, 2025c).	Unlikely to occur. No recent records nearby and habitat unsuitable/very marginal.
	Western Rosella, *Platycercus icterotis xanthogenys*			P4	Western Rosellas are found in open eucalypt forest and timbered areas, including cultivated land and orchards. The inland species occurs in drier woodland, with a heath understorey (Birdlife Australia, 2024).	Possibly occurs aerially over the survey area however habitat appears marginal/or unsuitable for breeding.

Class	Taxon	Conservation Status			Habitat Description	Likelihood of Occurrence
		EPBC Act	BC Act	DBCA		
Invertebrates	Tree-stem Trapdoor Spider *Idiosoma castellum*			P4	The species is geographically moderately widespread but is restricted to hillslopes (lower slopes to upper ridges) and banded ironstone formations in gravelly loam soils. The nearest record of I. castellum to the northern edge of the proposed exploration is approximately 60 km to the north (WAM records)	Possibly Occurs
Mammal	Chuditch, Western Quoll *Dasyurus geoffroii*	VU	VU		The major portion of the remaining natural populations occur in varying densities in jarrah (Eucalyptus marginata) forests and woodlands in the south-west corner of WA, and in woodlands, mallee shrublands and heaths along the south coast, east to the Ravensthorpe area. There are also occasional records from drier woodland and mallee shrubland in the Wheatbelt and Goldfield Regions (DCCEEW, 2025c).	Known to occur. Previously recorded during targeted survey (Ecoscape, 2024).
	Dibbler *Parantechinus apicalis*	EN			Dibblers have been recorded over an extensive area and it is likely that they can occupy a diverse range of habitats. Dibblers seem to prefer vegetation with a dense canopy greater than 1 m high which has been unburnt for at least 10 years or more. In some locations, the presence of Proteaceous and Myrtaceous flowering shrubs may also be important (DCCEEW, 2025c).	Unlikely to occur. No recent records nearby and habitat unsuitable/very marginal.
	Heath Mouse *Pseudomys shortridgei*	EN	VU		Heath mouse frequently inhabits species-rich dry heathland, and open woodland and forest habitats with a heath understorey. In both the western and eastern subpopulations there appears to be a preference for a structurally complex heath. In Western Australia, the heath mouse has been trapped mostly in species-rich heath but also in mixed scrub and mallee. The species has not been located in vegetation less than 10 years post-fire and it has been known to attain high densities in heath 30 years post-fire (DCCEEW, 2025c).	Possibly occurs. Within known range, however habitat appears marginal/or unsuitable.

Class	Taxon	Conservation Status			Habitat Description	Likelihood of Occurrence
		EPBC Act	BC Act	DBCA		
	Numbat *Myrmecobius fasciatus*	EN	EN		The species' habitat is generally dominated by eucalypts that provide hollow logs and branches for shelter and termites for food. Although its range has contracted to jarrah (Eucalyptus marginata) forest and wandoo (Eucalyptus wandoo) woodland, the numbat was found in a wide range of woodland types, including York gum (Eucalyptus loxophleba) and mallee (Eucalyptus spp.) woodland in Western Australia (DCCEEW, 2025c).	Would not occur. Considered to be regionally extinct.
	Red-tailed Phascogale, Red-tailed Wambenger, Kenngoor *Phascogale calura*	VU			The red-tailed phascogale occurs in remnant vegetation in the southern wheatbelt of Western Australia where annual mean rainfall is 400−500 mm. It occurs in the Avon Wheatbelt, Jarrah Forest, Mallee and Esperance Plains IBRA Bioregions and the Avon, Northern Agricultural, Rangelands, South Coast, Southwest and Swan Natural Resource Management Regions. Confined to woodlands with old-growth hollow- producing eucalypts, particularly Wandoo (Eucalyptus wandoo) and York gum (E. loxophleba), often with associated rock sheoak (Allocasuarina huegeliana), but has also been recorded in shrublands and various mosaics of woodland, shrubland and scrub-heath. It does not appear to extend into unfragmented habitat in either the Jarrah Forest to the west or the Mallee Bioregion to the east (DCCEEW, 2025c).	Unlikely to occur. Outside known range of species.
	Western Brush Wallaby *Notamacropus irma*			P4	Dry sclerophyll forest and woodland, including mallee areas with grassy understorey and thickets of shrubs. (ALA,2025).	Possibly occurs as occasional transient individuals only. Large expanses of similar habitat in surrounding areas.
	Western Mouse *Pseudomys occidentalis*			P4	The western mouse shows a preference for long unburnt habitat (between 30 and 50 yrs) on sandy clay loam or sandy loam. Vegetation in suitable habitats is variable and includes sparse low shrubland, tall dense shrubland, sparse to dense shrub mallee and mid-dense woodland. All sites	Possibly occurs. Within known range, however habitat appears marginal/or unsuitable.

Class	Taxon	Conservation Status			Habitat Description	Likelihood of Occurrence
		EPBC Act	BC Act	DBCA		
					where the western mouse has been collected have had patches of extremely dense vegetation. On some sites, populations occur in dense vegetation surrounded by granite rocks, which may afford them protection from fire. Quandong (Santalum acuminatum) and sedge species are thought to be important habitat requirements in the northern part of the western mouse's range. Populations are fragmented and restricted to this type of (fragmented) habitat.	
Reptile	Lake Cronin Snake *Paroplocephalus atriceps*			P3	Eucalyptus woodlands and granite outcrops.	Unlikely to occur. Habitat appears to be unsuitable.

* Migratory Shorebirds include: Motacilla cinerea (Grey Wagtail), Actitis hypoleucos (Common Sandpiper), Calidris melanotos (Pectoral Sandpiper) and Apus pacificus (Fork-tailed swift)

4.2 Field Assessment

4.2.1 Flora

4.2.1.1 Mt Hope

The field survey identified 130 vascular flora taxa within the survey area. These taxa represented 73 genera across 37 families, with the most diverse families being Myrtaceae and Fabaceae. Dominant genera include *Acacia, Melaleuca* and *Eucalyptus.* The full field species inventory is listed in Appendix C.

One introduced species (weed) was identified within the survey area. *Centaurea melitensis* (Maltese cock spur) was found in CLP-EW2.

4.2.1.2 Crossroads

The field survey identified 129 vascular flora taxa within the survey area. These taxa represented 53 genera across 25 families, with the most diverse families being Myrtaceae, Fabaceae and Proteaceae. Dominant genera include *Acacia, Melaleuca* and *Eucalyptus.* The full field species inventory is listed in Appendix D.

One introduced species (weed) was identified within the survey area. *Dittrichia graveolens* (Stinkwort) was found in the CLP-EW1 and CLP-MW1 vegetation communities and cleared areas.

4.2.1.3 Hatters & Slowdive

The field survey identified 93 vascular flora taxa within the survey area. These taxa represented 42 genera across 20 families, with the most diverse families being Myrtaceae and Fabaceae. Dominant genera include *Melaleuca, Acacia* and *Eucalyptus.* The full field species inventory is listed in Appendix E.

No introduced species (weeds) were identified within the targeted field survey area.

4.2.1.4 Significant Flora

According to the EPA *Environmental Factor Guideline for Flora and Vegetation* (EPA, 2016b) significant flora includes:

- flora being identified as threatened or priority species;
- locally endemic flora or flora associated with a restricted habitat type (e.g., surface water or groundwater dependent ecosystems);
- new species or anomalous features that indicate a potential new species;

- flora 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; and
- flora with relictual status, being representative of taxonomic groups that no longer occur widely in the broader landscape.

Five Priority Flora taxa were recorded within the Mt Hope survey area (Table 4-5, Figure 4-3). *Microcorys* sp. *Forrestania* (P4) was present at the CLP-EW4, CLP-RMW1, CLP-REW1 vegetation communities, as well as in cleared areas. *Eutaxia acanthoclada* (P3) was present in the CLP-REW1 vegetation community. *Teucrium diabolicum* (P3) was present in the cleared areas. *Eremophila inflata* (P4) was present in the CLP-REW1 and cleared areas. *Grevillea neodissecta* (P4) was present in HS-EW3.

Three Priority Flora taxa were recorded within the Crossroads survey area. *Eutaxia acanthoclada* (P3) was present in the CLP-EW1, CLP-REW2, CLP-MW1, HS-MW1, and RS-MW1 vegetation communities. *Microcorys* sp. Forrestania (P4) was present in the CLP-RMW1 and CLP-REW2 vegetation communities and cleared areas. *Teucrium diabolicum* (P3) was present in the HS-EW1 vegetation community.

One Priority Flora taxa was recorded within the Hatters survey area. *Grevillia lullfitzii* (P1) was present in the CLP-REW1, HS-EW1, RS-MW1, HS-REW1 and RS-RMW1 vegetation communities.

The desktop review identified *Eucalyptus steedmanii* intercepted the Crossroads survey area. This is an historical record (1978) and was not found during the field survey. The closest population of *E. steedmanii* is ~2km southwest.

Table 4-5: Significant Flora identified within the survey area

Taxon	Description	Image
Eremophila inflata (P4)	Shrub up to 1.5m high with blue-violet flowers. Occurs on brown/ red sandy clay loam (WAHERB, 1998-). More than 100 plants of this was seen at the Mt Hope area.	

Taxon	Description	Image
Eutaxia acanthoclada (P3)	Compact, mat-forming, prostrate shrub, to 0.3 m high. Flowers are yellow/orange/red, Oct to Nov. Light brown sandy clay, shallow sandy loam, red clay over banded ironstone, gravel. Gently undulating plains (WAHERB, 1998-). One plant was seen at Mt Hope; about 300 plants were seen at Crossroads.	
Grevillea lullfitzii (P1)	This taxon is described as a shrub, approximately 1.5 m high. It produces white/yellow flowers in December. It occurs on lateritic, shallow soils on granite (WAHERB, 1998-). About 30 plants were seen at Hatter Hill.	
Grevillea neodissecta (P4)	Shrub up to 1m high. Produces red or pink flowers (WAHERB, 1998-). One plant was seen at Mt Hope. Photo provided by Geoff Cockerton	
Microcorys sp. Forrestania (P4)	Prostrate or erect shrub, 0.35-0.4 m high. Flowers are white/purple, Jan or Apr. Yellow sandy clay or red-brown clay. Open woodland or cleared areas. (WAHERB, 1998-) >100 plants seen at Crossroads; >40 plants seen at Mt Hope.	
Teucrium diabolicum (P3)	Subshrub 10-20cm high with woody rootstock and young green stems and white flowers. Grows on red cracking clay or clay loam, usually in shallow depressions or on low undulating plains that support low scrub or heath, or in association with low open woodland (Wege and Davis, 2020). >100 plants seen at Crossroads; >100 plants seen at Mt Hope.	

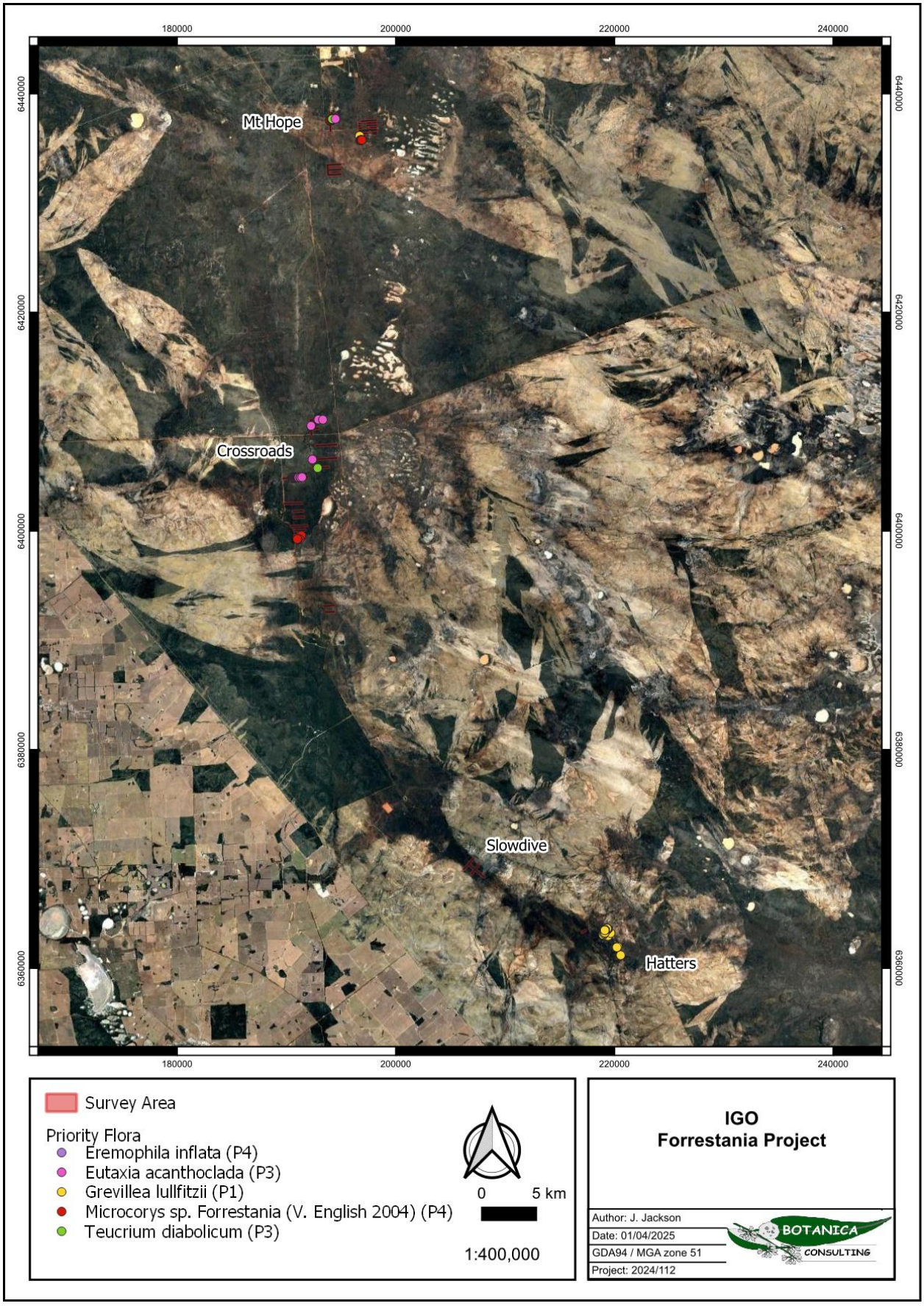


Figure 4-3: Priority flora locations in the survey area

4.2.1.5 Vegetation Communities

At Mt Hope, a total of 17 broad-scale vegetation types were identified within the survey area. Vegetation community descriptions and extent are listed below in Table 4-6 and illustrated spatially in Figure 4-4.

At Crossroads, a total of 17 broad-scale vegetation types were identified within the survey area. Vegetation community descriptions and extent are listed below in Table 4-7 and illustrated spatially in Figure 4-5.

At Slowdive and Hatters Hill, a total of eight broad-scale vegetation types were identified within the survey area. Vegetation community descriptions and extent are listed below in Table 4-8 and illustrated spatially in Figure 4-6 to Figure 4-7.

Vegetation community descriptions and extents were determined from field survey results, aerial imagery interpretation and extrapolation of the communities.

Table 4-6: Summary of Vegetation Types within the Mt Hope Survey Area

Landform	NVIS Vegetation Group	Veg Code	Veg Type	Area Ha	Area (%)	Health Rating	Photos
Clay Loam Plain	Eucalypt Woodland (MVG 5)	CLP-EW1	*Eucalyptus salmonophloia and E. longicornis open forest over Melaleuca pauperiflora and Acacia merrallii open shrubland over Eremophila decipiens, Olearia muelleri and Austrostipa hemipogon low open shrubland/tussock grassland*	3	5	Very Good	
		CLP-EW2	*E. salmonophloia* open woodland over *Melaleuca pauperiflora* and *Daviesia benthamii* shrubland over *Acacia camptoclada* and *Grevillea acuaria* open shrubland	5	7	Very Good	
		CLP-EW4	*Eucalyptus longicornis* and *E. salmonophloia* open woodland over *Melaleuca pauperiflora* and *Daviesia benthamii* shrubland over *Acacia camptoclada* and *Grevillea acuaria* open shrubland	2	4	Very Good	

Landform	NVIS Vegetation Group	Veg Code	Veg Type	Area Ha	Area (%)	Health Rating	Photos
	Mallee Woodland and Shrublands (MVG 14)	CLP-MS1	*Eucalyptus yilgarnensis* open woodland over *Melaleuca thyoides* shrubland over sparse *Tecticornia indica subsp. bidens*.	2	2	Very Good	
		CLP-MW1	*Eucalyptus calycogona low mallee woodland over Acacia hystrix subsp. hystrix, Eremophila glabra and Cryptandra myriantha shrubland over Gahnia ancistrophylla, Lepidosperma diurnum and L. sanguinolentum open sedgeland*	2	3	Very Good	
		CLP-MW3	*Eucalyptus calycogona* low mallee woodland over *Acacia hystrix* subsp*. hystrix, Eremophila glabra* and *Cryptandra myriantha* shrubland over *Gahnia ancistrophylla, Lepidosperma diurnum* and *L. sanguinolentum* open sedgeland	10	16	Very Good	

Landform	NVIS Vegetation Group	Veg Code	Veg Type	Area Ha	Area (%)	Health Rating	Photos
		CLP-MW4	*Eucalyptus calycogona* low mallee woodland over *Acacia hystrix subsp. hystrix*, *Eremophila glabra* and *Cryptandra myriantha* shrubland over *Gahnia ancistrophylla*, *Lepidosperma diurnum* and *L. sanguinolentum* open sedgeland	3	5	Very Good	
	Regrowth, Modified Native Vegetation (MVG 29)	CLP-REW 1 and CLP-REW4 Burnt	*Eucalyptus salmonophloia and E. longicornis open forest over Melaleuca pauperiflora and Acacia merrallii open shrubland over Eremophila decipiens, Olearia muelleri and Austrostipa hemipogon low open shrubland/tussock grassland*	14	21	Good	
		CLP-RMW1	*Eucalyptus calycogona* low mallee woodland over *Acacia hystrix subsp. hystrix*, *Eremophila glabra* and *Cryptandra myriantha* shrubland over *Gahnia ancistrophylla*, *Lepidosperma diurnum* and *L. sanguinolentum* open sedgeland	1	2	Good	

Landform	NVIS Vegetation Group	Veg Code	Veg Type	Area Ha	Area (%)	Health Rating	Photos
Hillslope	Eucalypt Woodland (MVG 5)	HS-EW2	*Eucalyptus longicornis* and *E. salmonophloia* open woodland over *Melaleuca pauperiflora* and *Daviesia benthamii* shrubland over *Acacia camptoclada* and *Grevillea acuaria* open shrubland	1	1	Very Good	
	Eucalypt Woodland (MVG 5)	HS-EW3	*Eucalyptus longicornis and E. salmonophloia open woodland over Melaleuca pauperiflora and Daviesia benthamii shrubland over Acacia camptoclada and Grevillea acuaria open shrubland*	17	26	Very Good	
	Eucalypt Woodland (MVG 5)	HS-EW5	*Eucalyptus flocktoniae low open woodland over Acacia erinacea and Santalum acuminatum open shrubland over Trymalium myrtillus, Halgania andromedifolia and Austrostipa nitida low open shrubland/tussock grassland*	2	3	Very Good	

Landform	NVIS Vegetation Group	Veg Code	Veg Type	Area Ha	Area (%)	Health Rating	Photos
	Regrowth, Modified Native Vegetation (MVG 29)	HS-REW1	*Eucalyptus salmonophloia* woodland over *E. calycogona/E. phaenophylla* open mallee and *Melaleuca coronicarpa*, *Melaleuca eleuterostachya* and *Melaleuca lateriflora* tall shrubland.	1	2	Good	
Rocky Hillslope	Eucalypt Woodland (MVG 5)	RH-EW3	*Eucalyptus livida* and *Allocasuarina campestris* open woodland over *Melaleuca hamata, Hakea kippistiana* and *Dampiera latealata* shrubland	0	0	Very Good	
Sandy Loam Plain	Mallee Woodland and Shrublands (MVG 14)	SLP-MW1	*Eucalyptus eremophila* mallee woodland over *Melaleuca hamata*, *Dodonaea bursariifolia* and *Exocarpos sparteus* shrubland over *Westringia cephalantha* and *Gompholobium gompholobioides* low shrubland	2	3	Very Good	

Landform	NVIS Vegetation Group	Veg Code	Veg Type	Area Ha	Area (%)	Health Rating	Photos
N/A	Cleared (MVG 25)	CA	Cleared for mining activity.	1	1	Completely Degraded	

Table 4-7: Summary of Vegetation Types within the Crossroads Survey Area

Landform	Major Vegetation Group	Vegetation Code	Vegetation Association	Area Ha	Area (%)	Health Rating	Photos
Clay-Loam Plain	Eucalyptus Woodland (MVG 5)	CLP-EW1	Low open forest of *Eucalyptus flocktoniae/ E. salubris/ E. urna* on clay-loam plain	37.09	36	Very Good	
		CLP-EW2	Mid open woodland of *Eucalyptus salmonophloia* on clay-loam plain	4.97	5	Very Good	
		CLP-EW3	Open low woodland of Eucalyptus salmonophloia over mallee shrubland of *E. pileata/ E. tephroclada/ E. celastroides* on clay-loam plain	4.87	5	Very Good	

Landform	Major Vegetation Group	Vegetation Code	Vegetation Association	Area Ha	Area (%)	Health Rating	Photos
	Regrowth, Modified Native Vegetation (MVG 29)	CLP-REW1	Recovering burnt low open forest *of Eucalyptus flocktoniae/ E. salubris/ E. urna* on clay-loam plain	0.15	0	Good	
		CLP-REW2	Recovering burnt open woodland of *Eucalyptus salmonophloia* on clay-loam plain	7.13	7	Good	
		CLP-RMW1	Burnt open low woodland of *Eucalyptus salmonophloia* over mallee shrubland of *E. pileata/ E. tephroclada/ E. celastroides* on clay-loam plain	2.04	2	Good	

Landform	Major Vegetation Group	Vegetation Code	Vegetation Association	Area Ha	Area (%)	Health Rating	Photos
	Mallee Woodland and Shrublands (MVG 14)	CLP-MW1	Open low woodland mallee shrubland of *E. pileata/ E. tephroclada/ E. celastroides* on clay-loam plain	21.25	21	Very Good	
Hillslope	Eucalyptus Woodland (MVG 5)	HS-EW1	*Eucalyptus salmonophloia* woodland over *E. calycogona/E. phaenophylla* open mallee and *Melaleuca marginata, Melaleuca eleuterostachya* and *Melaleuca lateriflora* tall shrubland	1.43	1	Very Good	
		HS-EW2	Mid mallee woodland of *Eucalyptus tephroclada* over tall sparse heathland of *Melaleuca hamata* and low mixed sparse shrubland on stony rise	5.15	5	Very Good	

Landform	Major Vegetation Group	Vegetation Code	Vegetation Association	Area Ha	Area (%)	Health Rating	Photos
	Mallee Woodland and Shrublands (MVG 14)	HS-MW1	Mid mallee woodland of *Eucalyptus calycogona/ E. pileata* over mid open heathland of *Melaleuca hamata* and mid open shrubland of *Acacia hemiteles* on rocky outcrop	1.61	2	Very Good	
	Mallee Woodland and Shrublands (MVG 14)	HS-MW2	Mid mallee woodland of *Eucalyptus celastroides/ E. cylindrocarpa/ E. tephroclada* over mid open heathland of *Acacia/ Melaleuca* spp. and low mixed open shrubland	3.45	3	Very Good	
	Regrowth, Modified Native Vegetation (MVG 29)	HS-REW1	Regrowth *Eucalyptus* spp. over mid shrubland of *Dodonaea stenozyga* and low shrubland of *Acacia intricata* on hillslope	1.15	1	Good	

Landform	Major Vegetation Group	Vegetation Code	Vegetation Association	Area Ha	Area (%)	Health Rating	Photos
Rocky Hill Slope	Eucalyptus Woodland (MVG 5)	RH-EW1	Open low woodland of *Eucalyptus salmonophloia* over mallee shrubland of *E. cylindrocarpa/ E. pileata* and low shrubland of *Acacia* sp on rocky hillslope	0.70	1	Very Good	
	Regrowth, Modified Native Vegetation (MVG 29)	RH-REW1	Burnt open low woodland of *Eucalyptus salmonophloia* over mallee shrubland of *E. cylindrocarpa/ E. pileata* and low shrubland of Acacia spp.	0.80	1	Good	
	Mallee Woodland and Shrublands (MVG 14)	RS-MW1	Low open woodland of *Allocasuarina campestris* over mid shrubland of *Hakea/ Melaleuca* spp. and low shrubland of *Thryptomene kochii/* low sedgeland of *Lepidosperma gahnioides* on hillslope	6.53	6	Very Good	

Landform	Major Vegetation Group	Vegetation Code	Vegetation Association	Area Ha	Area (%)	Health Rating	Photos
Closed Depression	Melaleuca shrublands (MVG 49)	CD-MF1	*Eucalyptus yilgarnensis* open woodland over *Melaleuca phoidophylla* shrubland over sparse *Tecticornia indica subsp. bidens*	0.82	1	Very Good	
N/A	N/A	CV	Cleared Vegetation	4.31	4	Completely Degraded	

Table 4-8 :Summary of Vegetation Types within the Slowdive and Hatters Survey Area

Landform	NVIS Vegetation Group	Veg Code	Veg Type	Area Ha	Area (%)	Health Rating	Photos
Clay Loam Plain	Regrowth, Modified Native Vegetation (MVG 29)	CLP-REW1	Recovering burnt Open low woodland of *Eucalyptus salmonophloia* over open mallee of *E. calycogona/E. phaenophylla and low scrub of Melaleuca marginata* , *Melaleuca eleuterostachya* and *Melaleuca lateriflora* on clay loam plain	20.77	53	Good	
	Regrowth, Modified Native Vegetation (MVG 29)	CLP-REW2	Recovering burnt *Eucalyptus urna , E. salubris* and *Melaleuca lateriflora* woodland over *Melaleuca sparsiflora, Melaleuca calyptroides* and *Acacia camptoclada* tall shrubland over *Exocarpos sparteus* and *Hakea corymbosa* shrubland on clay loam plain	1.85	5	Good	
	Regrowth, Modified Native Vegetation (MVG 29)	CLP-RMW1	Recovering burnt woodlands of *Eucalyptus eremophila* mallee woodland over *Melaleuca hamata*, *Dodonaea bursariifolia* and *Exocarpos sparteus* shrubland over *Westringia cephalantha* and *Gompholobium gompholobioides* low shrubland on clay loam plain	1.57	4	Good	

Landform	NVIS Vegetation Group	Veg Code	Veg Type	Area Ha	Area (%)	Health Rating	Photos
Hillslope	Eucalyptus Woodland (MVG 5)	HS-EW1	*Eucalyptus urna, E. salubris* and *Melaleuca lateriflora* woodland over *Melaleuca sparsiflora, Melaleuca calyptroides* and *Acacia camptoclada* tall shrubland over *Exocarpos sparteus* and *Hakea corymbosa* shrubland on hillslope	0.88	2	Very Good	
	Regrowth, Modified Native Vegetation (MVG 29)	HS-REW1	Recovering burnt *Eucalyptus urna*, *E. salubris* and *Melaleuca lateriflora* woodland over *Melaleuca sparsiflora*, *Melaleuca calyptroides* and *Acacia camptoclada* tall shrubland over *Exocarpos sparteus* and *Hakea corymbosa* shrubland on hillslope	8.03	20	Good	
Rocky Slope	Regrowth, Modified Native Vegetation (MVG 29)	RS-RMW1	Recovering burnt *Eucalyptus eremophila, Allocasuarina campestris* and *Melaleuca cordata* woodland over *Banksia cirsioides*, *Hakea francisiana* and *Drummondita hassellii* shrubland over *Hibbertia gracilipes*, *Acacia castanostegia* and *Lepidosperma amantiferrum* low shrubland/ sedgeland on rocky slope	6.33	16	Good	

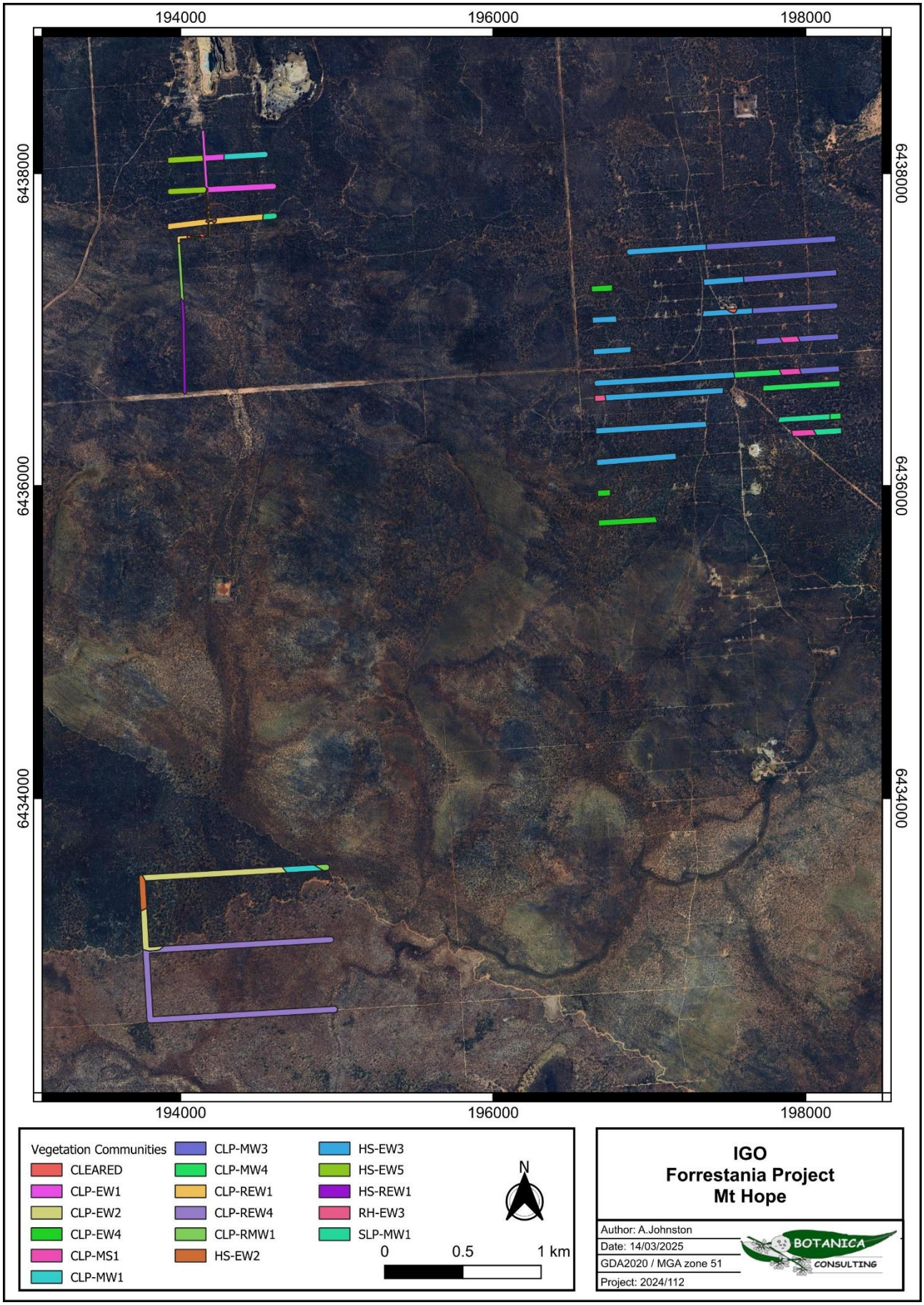


Figure 4-4: Vegetation Types within the Mt Hope Survey Area

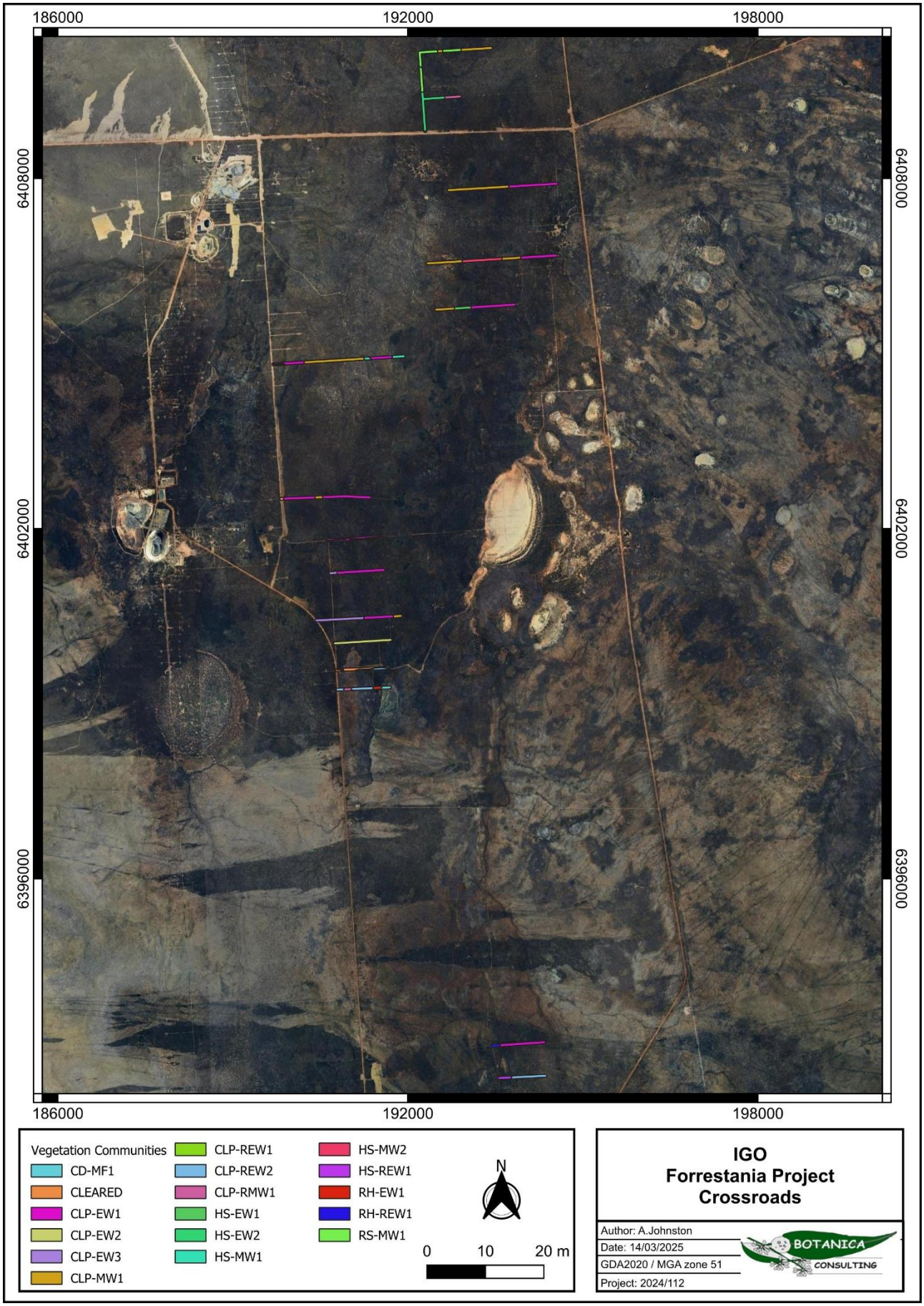


Figure 4-5: Vegetation Types within the Crossroads Survey Area

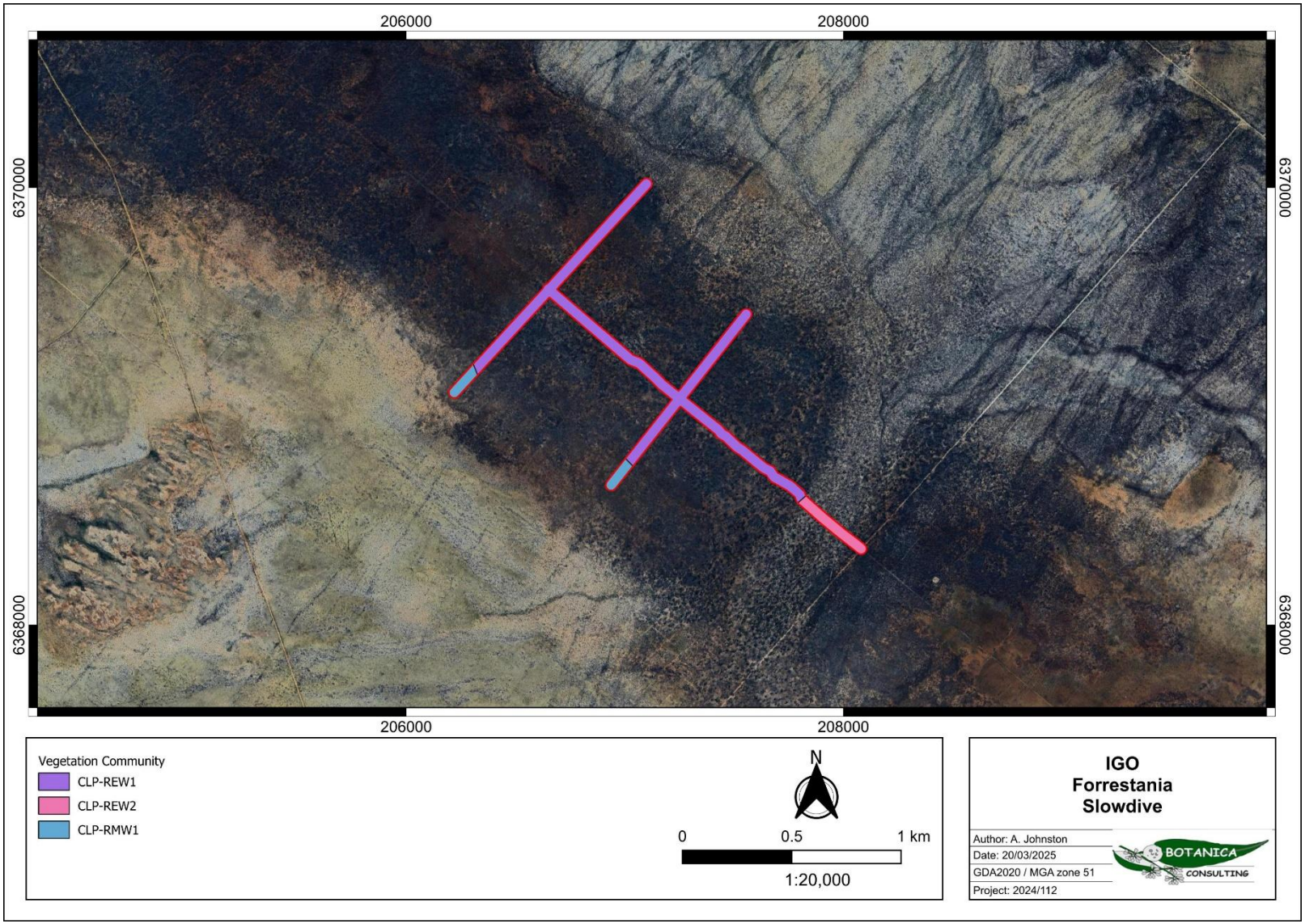


Figure 4-6: Vegetation Types within the Slowdive Survey Area

Figure 4-7: Vegetation Types within the Hatters Hill Survey Area

4.2.1.6 Vegetation Condition

Based on the vegetation condition rating scale adapted from Keighery (1994) and Trudgen, (1988), native vegetation within the survey area was rated as 'completely degraded' to 'very good' (Figure 4-8 to Figure 4-11 and Table 4-9). Vegetation condition rating descriptions are listed in Appendix B.

Disturbances within the survey area include access tracks and roads, gravel extraction (gravel pits) and clearing associated with mining.

Table 4-9: Vegetation Condition Rating within the Survey Area

Condition rating	Description	Area (ha)	Area (%)
Very Good	Vegetation structure has been altered by obvious signs of disturbance, caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing.	138.9	196.0
Good	More obvious signs of damage caused by human activity since European settlement, including some obvious impact on the vegetation structure such as that caused by low levels of grazing or slightly aggressive weeds.	66.0	93.2
Completely Degraded	The structure of the vegetation is no longer intact, and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees and shrubs.	4.8	6.8

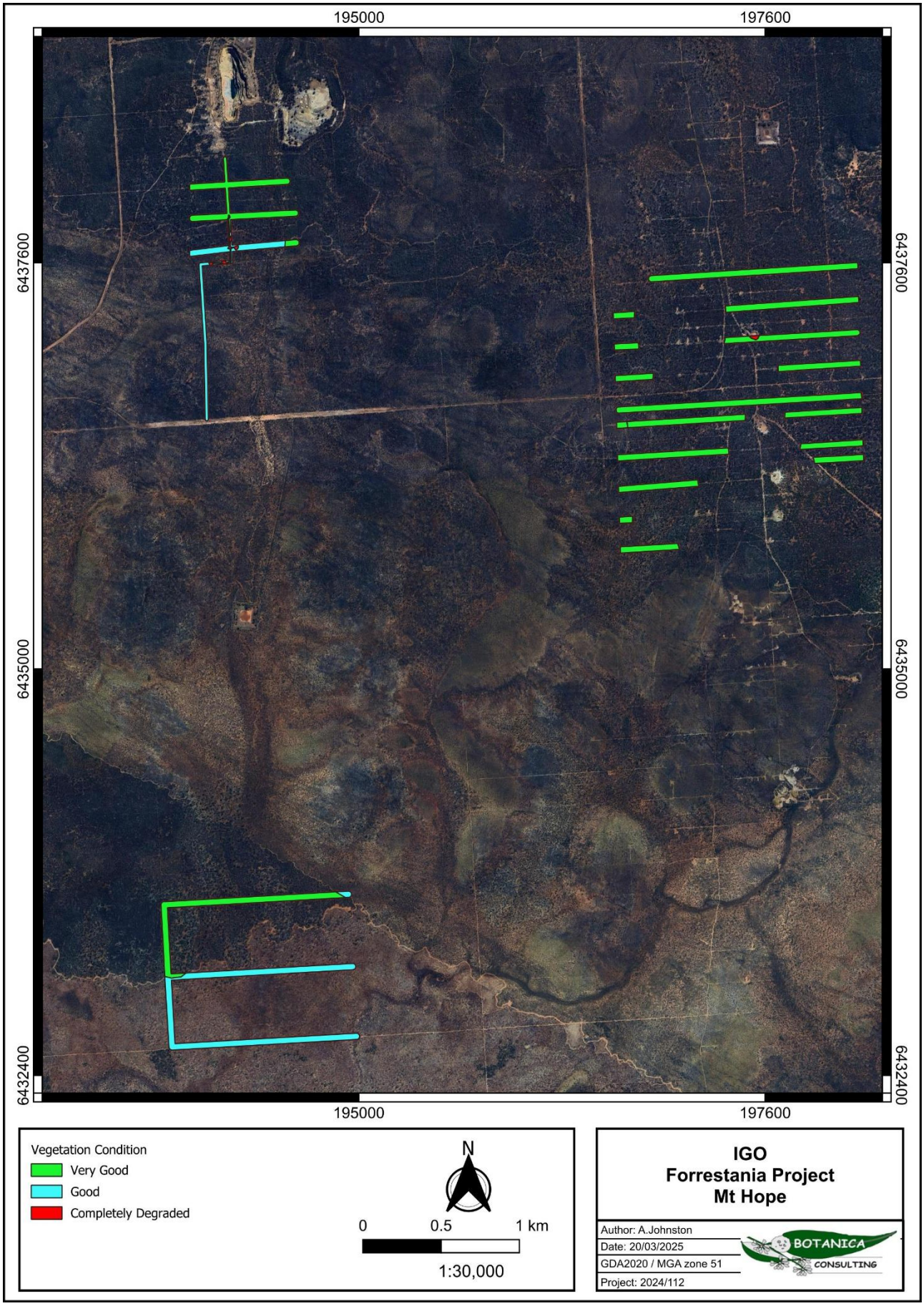


Figure 4-8: Vegetation Condition within the Mt Hope Survey Area

Figure 4-9: Vegetation Condition within the Crossroads Survey Area

Figure 4-10: Vegetation Condition within the Slowdive Survey Area

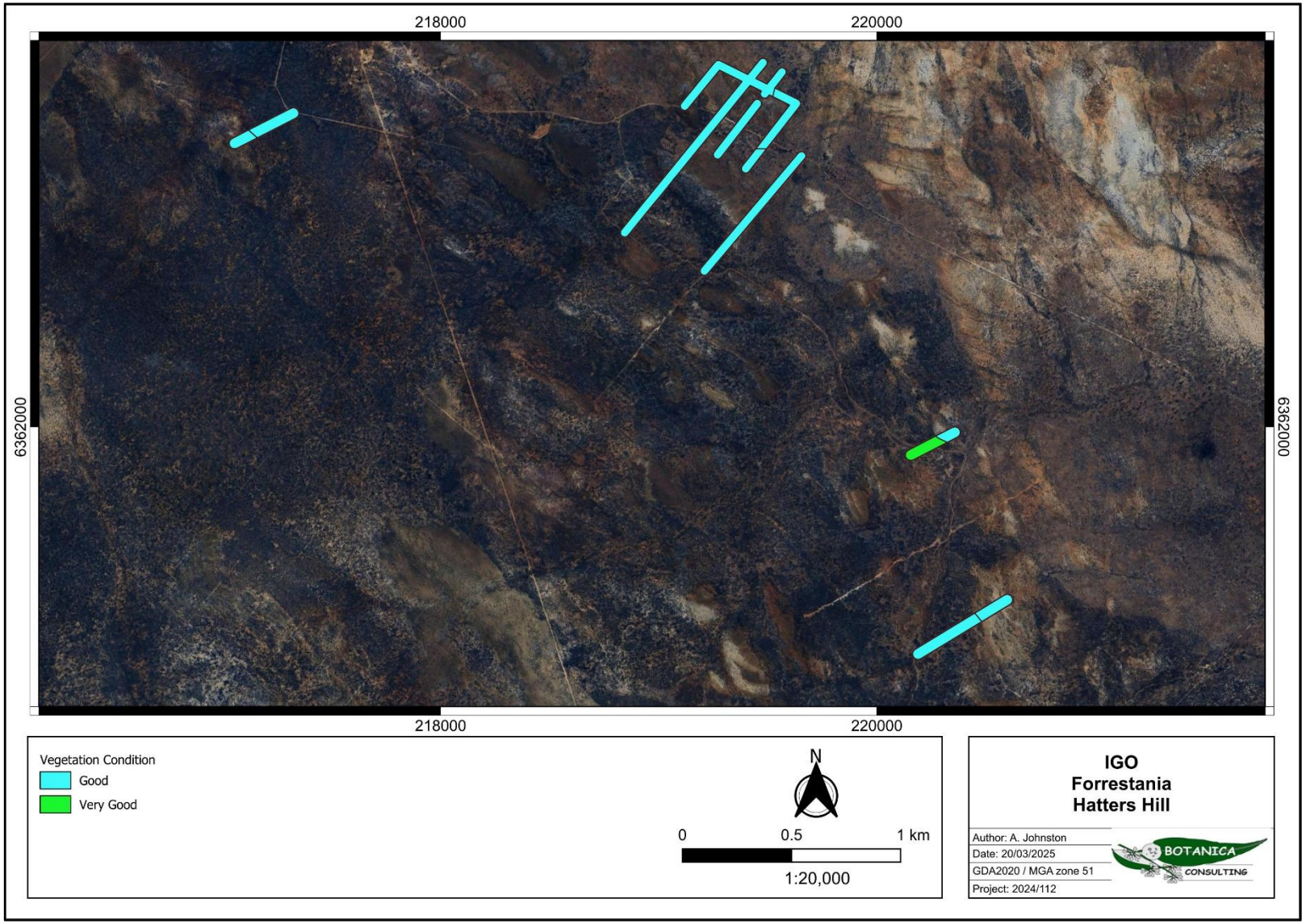


Figure 4-11: Vegetation Condition within the Hatters Hill Survey Area

4.2.1.7 Significant Vegetation

According to the EPA Environmental Factor Guideline for Flora and Vegetation (EPA, 2016b) significant vegetation includes:

- vegetation being identified as threatened or priority ecological communities;
- vegetation with restricted distribution;
- vegetation subject to a high degree of historical impact from threatening processes;
- vegetation which provides a role as a refuge; and
- vegetation providing an important function required to maintain ecological integrity of a significant ecosystem.

The field assessment identified the *Ironcap Hills vegetation assemblages (Mt Holland, Middle, North and South Ironcap Hills, Digger Rock and Hatter Hill) (Greenstone ranges)* (P3) Priority Ecological Community was not present within the survey area. Although the survey area is within the buffer of the PEC provided by DBCA, the on-ground survey did not identify that this PEC was present in any of the vegetation types. The *Eucalypt Woodlands of the Western Australian Wheatbelt* (CR) surround the survey areas and the *Plant assemblages of the Parker Range System* (P3) occur 23 km north of the Mt Hope drill lines. The *Salmon gum woodlands of the wheatbelt* (CR) occur 17 km southeast of the Crossroads survey area.

4.2.2 Fauna

4.2.2.1 Fauna Habitat

Based on vegetation and associated landforms identified during the flora and vegetation assessment, six broad scale terrestrial fauna habitats were identified as occurring within the Mt Hope survey area. Table 4-10 provides a description of these fauna habitat types, and the extent of fauna habitats is shown spatially in Figure 4-12.

Six broad scale terrestrial fauna habitats were identified as occurring within the Crossroads survey area. Table 4-11 provides a description of these fauna habitat types, and the extent of fauna habitats is shown spatially in Figure 4-13.

Three broad scale terrestrial fauna habitats were identified as occurring within the Slowdive and Hatters survey areas. Table 4-12 provides a description of these fauna habitat types, and the extent of fauna habitats is shown spatially in Figure 4-14 and Figure 4-15.

4.2.2.2 Opportunistic Fauna Observations

During the field survey opportunistic observations of fauna species were made with a total of 22 fauna species observed. This included five reptiles, 16 birds and 1 mammal species. The full field species inventory is listed in Appendix F.

Table 4-10: Main terrestrial fauna habitats within the Mt Hope survey area

Landform	Description	Representative Fauna Attributes	Example Image
Eucalypt Woodland on a clay loam plain Area= 11.8ha (17.7%)	*Eucalyptus* woodland *over Allocasuarina/ Melaleuca* shrubland	• Ground not particularly suited to burrowing species. • Low to moderate diversity vegetation strata supporting diverse avifauna assemblage. • Low to moderate leaf litter and vegetation density. • Tree logs/ hollows for fauna refuge.	
Mallee woodland on a clay loam plain Area=15.8ha (23.6%)	*Eucalyptus* mallee woodland over *Melaleuca* shrubland	• Ground not particularly suited to burrowing species. • Moderately diverse vegetation strata supporting diverse avifauna assemblage. •Moderate leaf litter and vegetation density.	
Regrowth of eucalypt and mallee woodland on a clay loam plain Area= 15ha (22.4%)	Regrowth *Eucalypt* woodland over mixed shrubland	• Ground not particularly suited to burrowing species. •Limited diverse vegetation strata supporting less diverse avifauna assemblage. • Limited leaf litter and absence of tree logs/ hollows for fauna refuge.	

Landform	Description	Representative Fauna Attributes	Example Image
Eucalypt woodland on a hillslope Area= 20.3ha (30.3%)	Eucalyptus and Allocasuarina woodland over mixed shrubland	• Rocky substrate not well suited for burrowing. • Moderately diverse vegetation strata supporting diverse avifauna assemblage. • Moderate to high leaf litter and vegetation density. • Tree logs/ hollows for fauna refuge.	
Regrowth of eucalypt woodland on a hillslope and rocky hillslope Area=1.2ha (1.8%)	Regrowth Eucalypt woodland over mixed shrubland	• Ground not particularly suited to burrowing species. • Limited diverse vegetation strata supporting less diverse avifauna assemblage. • Limited leaf litter and absence of tree logs/ hollows for fauna refuge.	
Mallee woodland on sand loam plain Area= 2.3ha (3.4%)	*Eucalyptus* mallee woodland over *Melaleuca, Dodonaea* and *Exocarpos* shrubland over Westringia and Gompholobium low shrubland	• Ground suited to burrowing species. •Moderately diverse vegetation strata supporting diverse avifauna assemblage. •Moderate leaf litter and vegetation density.	

Table 4-11: Main terrestrial fauna habitats within the Crossroads survey area

Landform	Description	Representative Fauna Attributes	Example Image
Eucalypt Woodland on a clay loam plain Area= 46.9ha (45.4%)	*Eucalyptus* woodland *over Allocasuarina/ Melaleuca* shrubland	• Ground not particularly suited to burrowing species. • Low to moderate diversity vegetation strata supporting diverse avifauna assemblage. • Low to moderate leaf litter and vegetation density. • Tree logs/ hollows for fauna refuge.	
Mallee woodland on a clay loam plain Area=21.3ha (20.5%)	*Eucalyptus* mallee woodland over *Melaleuca* shrubland	• Ground not particularly suited to burrowing species. • Moderately diverse vegetation strata supporting diverse avifauna assemblage. •Moderate leaf litter and vegetation density.	
Regrowth of eucalypt and mallee woodland on a clay loam plain Area= 9.3ha (9%)	Regrowth *Eucalypt* woodland over mixed shrubland	• Ground not particularly suited to burrowing species. •Limited diverse vegetation strata supporting less diverse avifauna assemblage. • Limited leaf litter and absence of tree logs/ hollows for fauna refuge.	

Landform	Description	Representative Fauna Attributes	Example Image
Eucalypt woodland/ Mallee woodland on a hillslope and rocky hillslope Area= 18.9ha (18.2%)	*Eucalyptus* and Mallee woodland over mixed shrubland	• Rocky substrate not well suited for burrowing. • Moderately diverse vegetation strata supporting diverse avifauna assemblage. • Moderate to high leaf litter and vegetation density. • Tree logs/ hollows for fauna refuge.	
Regrowth of eucalypt woodland on a hillslope and rocky hillslope Area= 2ha (1.9%)	Regrowth *Eucalypt* woodland over mixed shrubland	• Ground not particularly suited to burrowing species. • Limited diverse vegetation strata supporting less diverse avifauna assemblage. • Limited leaf litter and absence of tree logs/ hollows for fauna refuge.	
Melaleuca shrubland in a closed depression Area=0.8ha (0.8%)	*Eucalyptus* open woodland over *Melaleuca* shrubland over sparse *Tecticornia*	• Ground not particularly suited to burrowing species. • Moderately diverse vegetation strata supporting diverse avifauna assemblage. •Moderate leaf litter and vegetation density.	

Table 4-12: Main terrestrial fauna habitats within the Slowdive and Hatters Hill survey area

Landform	Description	Representative Fauna Attributes	Example Image
Regrowth of eucalypt and mallee woodland on a clay loam plain Area= 24.2ha (61.4%)	Regrowth *Eucalypt* woodland over mixed shrubland	• Ground not particularly suited to burrowing species. •Limited diverse vegetation strata supporting less diverse avifauna assemblage. • Limited leaf litter and absence of tree logs/ hollows for fauna refuge.	
Regrowth of eucalypt woodland on a hillslope and rocky hillslope Area=14.4ha (36.4%)	Regrowth Eucalypt woodland over mixed shrubland	• Ground not particularly suited to burrowing species. • Limited diverse vegetation strata supporting less diverse avifauna assemblage. • Limited leaf litter and absence of tree logs/ hollows for fauna refuge.	
Eucalypt woodland on a hillslope Area= 0.9ha (2.2%)	Eucalyptus and Allocasuarina woodland over mixed shrubland	• Rocky substrate not well suited for burrowing. • Moderately diverse vegetation strata supporting diverse avifauna assemblage. • Moderate to high leaf litter and vegetation density. • Tree logs/ hollows for fauna refuge.	

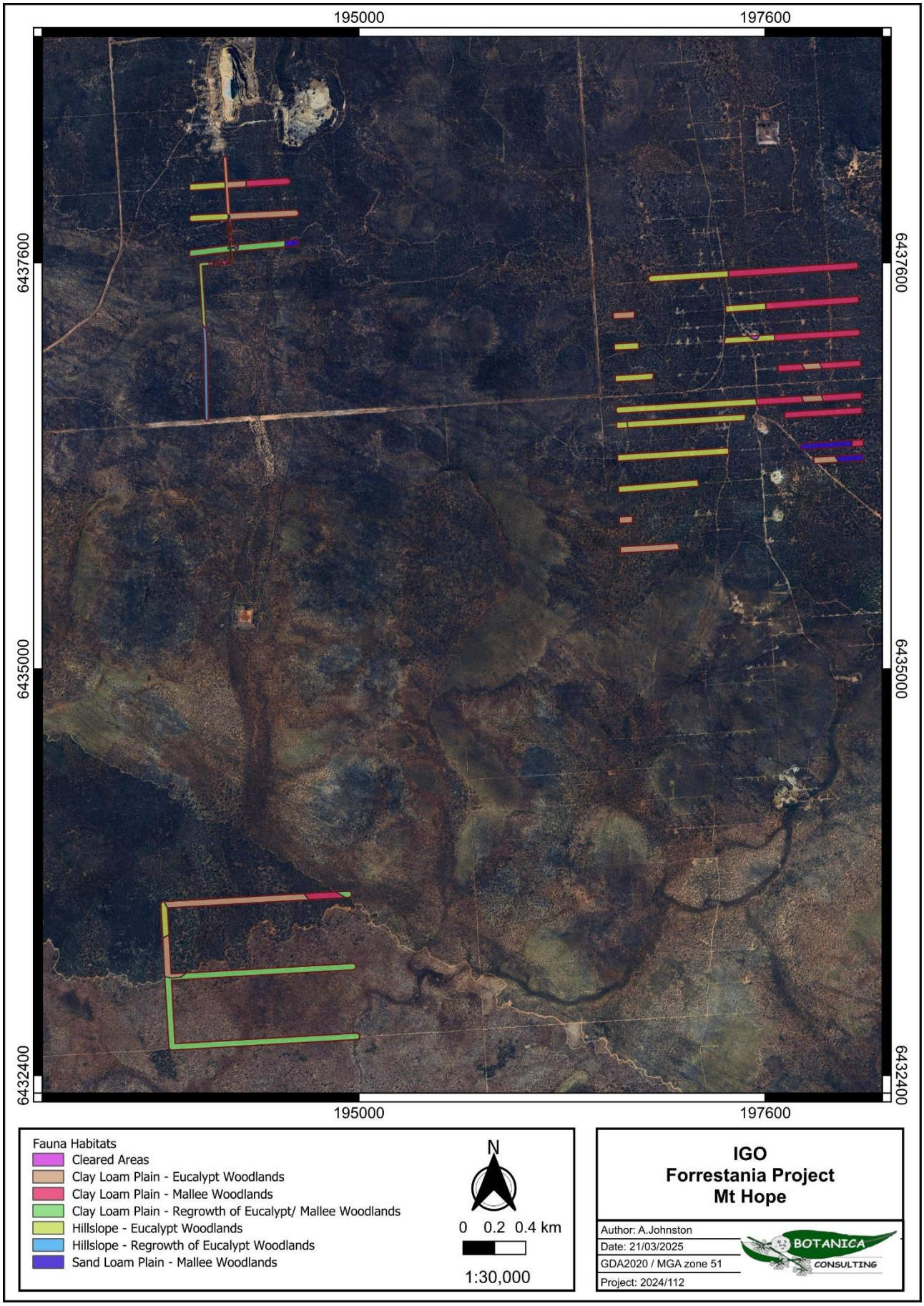


Figure 4-12: Fauna habitats within the Mt Hope survey area

Figure 4-13: Fauna habitats within the Crossroads survey area

Figure 4-14: Fauna habitats within the Slowdive survey area

Figure 4-15: Fauna habitats within the Hatters Hill survey area

4.2.2.3 Significant Fauna Risk Assessment

According to the EPA *Environmental Factor Guideline for Terrestrial Fauna* (EPA, 2016c) significant fauna includes:

- Fauna being identified as a Threatened or Priority species;
- Fauna species with restricted distribution;
- Fauna subject to a high degree of historical impact from threatening processes; and
- Fauna providing an important function required to maintain the ecological integrity of a significant ecosystem.

Six of the fauna species of conservation significance that were identified from the desktop review to possibly occur in the survey area were further assessed for the likelihood of them utilising the survey area based on direct on ground observations.

- **Carnaby's Cockatoo (*Calyptorhynchus latirostris)* - Endangered (EPBC Act and BC Act)**

  This species range extends throughout the south-west, south coast and wheatbelt regions of Western Australia. Vegetation within the survey area may represent suitable habitat, with some mature trees of key habitat species including *Eucalyptus longicornis* observed within the survey area. However, tree hollows observed during this survey were deemed not suitable for Carnaby's cockatoos to breed in. There are large expanses of similar habitat in nearby conservation reserves, and these areas would be considered more favourable for the species to breed and seek refuge.

- **Grey Falcon (*Falco hypoleucos*) – Vulnerable (EPBC Act and BC Act)**

  This species is sparsely recorded throughout inland Australia. Suitable habitat may be present but is unlikely to represent critical habitat. No suitable nesting sites were observed during the field survey. The species may inhabit the area as part of its larger home range. Significant impact unlikely.

- **Malleefowl (*Leipoa ocellata)* - Vulnerable (EPBC Act and BC Act)**

  This species is occasionally recorded in the Mallee bioregion, and the DBCA fauna database has numerous records of sightings of Malleefowl within 40 km of the survey area (DBCA, 2025c). No old or active Malleefowl mounds were seen in the survey area and no scats, feathers or tracks were seen. The habitat observed was considered potential for Malleefowl habitat, it consisted of an open canopy cover of woodland in most areas, and there were low-medium levels of leaf litter,

therefore possible that Malleefowl would use this area for mound building. There are large expanses of similar habitat in nearby conservation reserves, and these areas would be considered more favourable for the species to breed and seek refuge.

- **Chuditch, Western Quoll (*Dasyurus geoffroii*) – Vulnerable (EPBC Act and BC Act)**

This species occurs in the southwest of Western Australia in dry and wet sclerophyll forests, including contiguous Jarrah Forest and mallee. Habitat in the area is deemed suitable for the Western Quoll. A targeted survey conducted by Ecoscape in 2024 found a Western Quoll surrounding the survey area.

- **Heath Mouse (*Pseudomys shortridgei*) – Endangered (EPBC Act) and Vulnerable (BC Act)**

This species prefers mixed laterite heath *Dryandra erythrocephala, Hakea cygna, Hakea pandanicarpa, Melaleuca tuberculata, Banksia rufa*, *Beaufortia micrantha*, *Isopogon teretifolius, Banksia obovata*, *Banksia nivea, Adenanthos flavidiflorus*, *Petrophile circinata, Verticordia chrysantha, Hibbertia exasperata, Leucopogon* sp., *Petrophile trifida, Callitris roei* and *Cyperaceae* sp. 1 (Botanica, 2024). The vegetation that had previously been documented to occur in the survey area is Eucalypt (or mallee) open woodland, usually with a mixed understory of an open shrub layer. There was no heath vegetation identified in the survey area; therefore Heath mouse populations are unlikely to occur.

- **Red-tailed Phascogale (*Phascogale calura)* - Vulnerable (EPBC Act)**

Vegetation within the survey area may represent suitable habitat, with some mature trees of key habitat species including *Eucalyptus longicornis* observed within the survey area. The Red-tailed phascogale possibly occurs as an occasional transient in the survey area. There are large expanses of similar habitat in nearby conservation reserves, and these areas would be considered more favourable for the species to breed and seek refuge.

In summary, it is likely that the survey area provides some value to conservation significant fauna. See Table 4-13 for an assessment against native vegetation clearing principles listed under Schedule 5 of the EP Act.

4.3 Matters of National Environmental Significance

4.3.1 Environment Protection and Biodiversity Conservation Act 1999

The EPBC Act protects Matters of National Environmental Significance (MNES) and is used by the Commonwealth DCCEEW to list threatened taxa and ecological communities into categories based on the criteria set out in the EPBC Act (www.environment.gov.au/epbc/index.html). The EPBC Act provides a national environmental assessment and approval system for proposed developments and enforces strict penalties for unauthorised actions that may affect matters of national environmental significance. MNES as defined by the Commonwealth EPBC Act include:

- Nationally threatened flora and fauna species;
- World heritage properties;
- National heritage places;
- Wetlands of international importance (often called 'Ramsar' wetlands after the international treaty under which such wetlands are listed);
- Nationally threatened ecological communities;
- Commonwealth marine area;
- The Great Barrier Reef Marine Park; and
- Nuclear actions (including uranium mining) are a water resource, in relation to coal seam gas development and large coal mining development.

No threatened flora or fauna species listed under the EPBC Act were identified during the field survey. No other matters of national environmental significance were recorded within the survey area.

4.4 Matters of State Environmental Significance

4.4.1 Environmental Protection Act 1986 (WA)

The EP Act provides for the prevention, control and abatement of pollution and environmental harm, for the conservation, preservation, protection, enhancement and management of the environment. The EP Act is administered by The Department of Water and Environment Regulation (DWER), which is the State Government's environmental regulatory agency.

Under Section 51C of the *EP Act 1986* and the *Environmental Protection (Clearing of Native Vegetation) Regulations (Regulations) 2004* (WA) any clearing of native vegetation in Western Australia that is not eligible for exemption under Schedule 6 of the EP Act or under the Regulations requires a clearing permit from the DWER or the Department of Energy, Mines, Industry Regulation and Safety (DEMIRS).

Under Section 51A of the *EP Act 1986* native vegetation includes aquatic and terrestrial vegetation indigenous to Western Australia, and intentionally planted vegetation declared by regulation to be native vegetation, but not vegetation planted in a plantation or planted with commercial intent.

Section 51A of the *EP Act 1986* defines clearing as "the killing or destruction of; the removal of; the severing or ringbarking of trunks or stems of; or the doing of substantial damage to some or all of the native vegetation in an area, including the flooding of land, the burning of vegetation, the grazing of stock or an act or activity that results in the above". Exemptions under Schedule 6 of the EP Act and the EP Regulations do not apply in ESAs as declared under Section 51B of the EP Act or TEC listed under State and Commonwealth legislation.

No threatened flora species were identified during the field survey.

4.4.2 Biodiversity Conservation Act 2016

The BC Act is used by the Western Australian DBCA for the conservation and protection of biodiversity and biodiversity components in Western Australia and to promote the ecologically sustainable use of biodiversity components in the State. Taxa are classified as 'Threatened" when their populations are geographically restricted or are threatened by local processes (see following sections for Threatened definitions). Under the BC Act all native flora and fauna are protected throughout the State. Financial penalties are enforced under the BC Act if threatened species are collected without an appropriate licence.

Under Section 54(1) of the BC Act, habitat is eligible for listing as critical habitat if:

a) it is critical to the survival of a threatened species or a threatened ecological community; and
b) its listing is otherwise in accordance with the ministerial guidelines.

No Threatened flora or fauna species listed under the BC Act were observed during the field survey.

4.5 Other Areas of Conservation Significance

The DBCA lists 'Priority' species and communities which are under consideration for declaration as 'Threatened' under the BC Act. These Priority species/ communities have no formal legal protection until they are endorsed by the Minister as being Threatened. No Priority Ecological Communities were identified within the survey area.

Five Priority Flora taxa were recorded within the Mt Hope survey area. Three Priority Flora taxa were recorded within the Crossroads survey area. One Priority Flora taxa were recorded within the Hatters survey area. These included *Microcorys* sp. Forrestania (P4), *Eutaxia acanthoclada* (P3), *Teucrium diabolicum* (P3), *Grevillea lullfitzii* (P3) and *Eremophila inflata* (P4)

There are no wetlands of international importance (RAMSAR Wetlands) or national importance (Australian Nature Conservation Agency Wetlands) within the survey area.

The survey area is not located within a gazetted conservation reserve. The northern part of the Crossroads survey area is approximately 350 m south of the Lake Cronin Nature Reserve (R36526). The Mt Hope survey area is approximately 13.3 km south of the Jilbadji Nature Reserve (R24049).

4.6 Native Vegetation Clearing Principles

Based on the outcomes from the survey undertaken, Botanica assessed the results of the desktop and field survey with regards to the native vegetation clearing principles listed under Schedule 5 of the EP Act (Table 4-13). The assessment found that the proposed vegetation clearing activities could be at variance with one of the clearing principles (f).

Table 4-13: Assessment Against Native Vegetation Clearing Principles

Letter	Principle	Assessment	Outcome
Native vegetation should not be cleared if it:			
(a)	comprises a high level of biological diversity.	Vegetation identified within the survey area is not considered to be of high biological diversity and is well represented outside of the survey area. Six Priority Flora taxa as listed by DBCA were identified within the survey area.	Clearing is unlikely to be at variance with this principle
(b)	comprises the whole or part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to WA.	A desktop and on ground assessment concluded that it was unlikely that any threatened or conservation significant fauna would use the area for breeding or refuge. Any clearing within the area is unlikely to impact significant fauna.	Clearing is unlikely to be at variance with this principle
(c)	includes, or is necessary for the continued existence of rare flora.	No Threatened Flora taxa, pursuant to the BC Act and the EPBC Act were identified within the survey area.	Clearing is not at variance with this principle
(d)	comprises the whole or part of or is necessary for the maintenance of a threatened ecological community (TEC).	No Threatened Ecological Communities, pursuant to the BC Act and the EPBC Act are located within the survey area (none identified during previous flora/vegetation surveys or listed on DBCA database as occurring within the survey area).	Clearing is not at variance to this principle
(e)	is significant as a remnant of native vegetation in an area that has been extensively cleared	Vegetation within the survey area retains >96% of the pre-European extent, and development within the survey area will not significantly reduce the current extent.	Clearing is not at variance to this principle
(f)	is growing, in, or in association with, an environment associated with a watercourse or wetland	There are several minor ephemeral drainage lines that intersect the survey area.	Clearing may be at variance with this principle
(g)	Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.	Clearing native vegetation within the survey area is unlikely to lead to land degradation issues such as salinity, water logging or acidic soils.	Clearing is unlikely to be at variance with this principle

Letter	Principle	Assessment	Outcome
Native vegetation should not be cleared if it:			
(h)	Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.	The nearest gazetted conservation reserve is the Lake Cronin Nature Reserve, 350 m north of the Crossroads survey area. Disturbances within the survey area are unlikely to impact this Reserve.	Clearing is unlikely to be at variance with this principle
(i)	Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.	Several ephemeral drainage lines were identified within the survey area. Clearing activities are unlikely to impact hydrological systems.	Clearing is unlikely to be at variance with this principle
(j)	Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding.	Rainfall in the Western Mallee subregion is characterized as Warm Mediterranean, with 250 500 mm of annual rainfall. Clearing within the survey area is not likely to increase the incidence or intensity of flooding within the survey area or surrounds.	Clearing is unlikely to be at variance to this principle

5 BIBLIOGRAPHY

Beard, J.S., (1990). *Plant Life of Western Australia*. Kangaroo Press Pty Ltd, NSW.

Botanica Consulting (2015). *Level 1 Flora and Vegetation Survey South Ironcap.* Prepared for Western Areas Limited, November 2010.

Botanica Consulting (2020a). *Reconnaissance Flora and Basic Fauna Assessment.* Prepared on behalf of Forrestania Resources Ltd., October 2022.

Botanica Consulting (2020b). *Targeted search for flora/ fauna and vegetation of conservation significance-Crossroads exploration program.* Prepared on behalf of Firefly Resources Ltd., January 2020.

Botanica Consulting (2022). *Lady Lila Project: Targeted Flora and Basic Fauna Assessment*. Prepared on behalf of Forrestania Resources Ltd., October 2022.

Botanica Consulting (2024). *Forrestania Project – Heath mouse desktop assessment*. Unpublished report prepared for IGO Limited, March 2024.

Botanica Consulting (2025). *South Ironcap Project: Flora and Fauna Assessment.* Unpublished report prepared for IGO Limited, February 2025.

Bureau of Meteorology [BoM] (2020). *Groundwater Dependent Ecosystems Atlas*. Bureau of Meteorology. Available: http://www.bom.gov.au/water/groundwater/gde/map.shtml

Bureau of Meteorology [BoM] (2025). *Climate Data*. Bureau of Meteorology. Available: http://www.bom.gov.au/climate. Accessed 18th February 2025.

DBCA (2024). *Guidelines for determining the likely presence and habitat usage of night parrot (Pezoporus occidentalis) in Western Australia*. Accessed March 2025.

DBCA (2025a). *Priority/ Threatened Flora Database Search [Ref: 26-0325FL]*. Obtained from Department of Biodiversity, Conservation and Attractions. March 2025.

DBCA (2025b). *NatureMap Database search*. Obtained from Department of Biodiversity, Conservation and Attractions, March 2025.

DBCA (2025c). *Priority/ Threatened Fauna Database Search [Ref: 14-0325FA]*. Obtained from Department of Biodiversity, Conservation and Attractions. March 2025.

DBCA (2025d). *Priority/ Threatened Ecological Communities Database Search [Ref: 08-0325EC]*. Obtained from Department of Biodiversity, Conservation and Attractions. March 2025.

Davis & Wege (2020) *Better the devil you know: Teucrium diabolicum (Lamiaceae), a new species from mining tenements in the Coolgardie bioregion.* Obtained from https://florabase.dbca.wa.gov.au/science/nuytsia/960.pdf . Accessed March 2025.

Department of Climate Change, Energy, the Environment and Water [DCCEEW] (2012). *Interim Biogeographic Regionalisation for Australia (IBRA), Version 7.* Department of the Environment and Energy.

Department of Climate Change, Energy, the Environment and Water [DCCEEW] (2025a). *Protected Matters Search Tool.* Environment Protection and Biodiversity Conservation Act 1999 (Cth). Accessed February 2025.

Department of Climate Change, Energy, the Environment and Water [DCCEEW] (2025b). *Approved Conservation Advice for Eucalyptus steedmanii (Steedmans Gum).* Retrieved from: https://www.environment.gov.au/biodiversity/threatened/species/pubs/15393-conservation-advice.pdf. Accessed March 2025.

Department of Climate Change, Energy, the Environment and Water [DCCEEW] (2025c). *Species Profile and Threats Database.* Accessed March 2025.

DotEE (2017). *National Vegetation Information System (NVIS) Major Vegetation Groups, Version 4.2.* Department of the Environment and Energy.

DPIRD (2019). *Pre-European Vegetation (DPIRD_006).* Department of Primary Industries and Regional Development, Western Australia, 24 July 2019.

Ecoscape (2024). *Baseline Chuditch Population Survey.* Prepared on behalf of IGO Limited, October 2024.

EPA (2016a). *Technical Guide - Flora and Vegetation Surveys for Environmental Impact Assessment – December 2016*. Environmental Protection Authority.

EPA (2016b), *Environmental Factor Guideline for Flora and Vegetation*. Environmental Protection Authority.

EPA (2016c), *Environmental Factor Guideline for Terrestrial Fauna*. Environmental Protection Authority.

EPA (2020). *Technical Guide – Terrestrial Fauna Surveys for Environmental Impact Assessment – June 2020.* Environmental Protection Authority.

Geoscience Australia (2015). *Surface Hydrology 250K Topographical Map. Australian Government.*

Gibson, N (2004). *Flora and vegetation of the Eastern Goldfield Ranges: Part 7. Middle and South Ironcap, Digger Rock and Hatter Hill*. Journal of the Royal Society of Western Australia, 87(2):49-62.

Government of Western Australia (2019). 2018 Statewide Vegetation Statistics (formerly the CAR Reserve Analysis).

Terratree (2022). *Detailed Flora and Vegetation Survey of Lady Lila project area.* Prepared on behalf of Forrestania Resources Ltd., February 2022.

Tille, P. (2006). *Soil Landscapes of Western Australia's Rangelands and Arid Interior*. Department of Agriculture and Food Western Australia

Western Australian Herbarium (1998–). *Florabase—the Western Australian Flora*. Department of Biodiversity, Conservation and Attractions. https://florabase.dpaw.wa.gov.au/ (Accessed March 2025).

APPENDIX A:
CONSERVATION RATINGS BC ACT AND EPBC ACT

Definitions of Conservation Significant Species

Code	Category
State categories of Threatened and Priority species	
Threatened Species (T) Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as Threatened species under section 26(2) of the BC Act.	
CR	**Critically Endangered** 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. Published under Schedule 2, Division 1 of the *Biodiversity Conservation (Listing of Native species) (Fauna) Order 2024* for critically endangered fauna or Schedule 1 Division 1 of the Bio*diversity Conservation (Listing of Native Species) (Flora) Order 2024* for critically endangered flora.
EN	**Endangered** 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. Published under Schedule 2, Division 2 of the *Biodiversity Conservation (Listing of Native species) (Fauna) Order 2024* for endangered fauna or Schedule 1 Division 2 of the Bio*diversity Conservation (Listing of Native Species) (Flora) Order 2024* for endangered flora.
VU	**Vulnerable** 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. Published under Schedule 2, Division 3 of the *Biodiversity Conservation (Listing of Native species) (Fauna) Order 2024* for vulnerable fauna or Schedule 1 Division 3 of the Bio*diversity Conservation (Listing of Native Species) (Flora) Order 2024* for vulnerable flora.
Extinct species Listed by order of the Minister as extinct under section 23(1) of the BC Act as extinct or extinct in the wild.	
EX	**Extinct** 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). Published as presumed extinct under Schedule 3 of the *Biodiversity Conservation (Listing of Native species) (Fauna) Order 2024* for extinct fauna or Schedule 2 of the Bio*diversity Conservation (Listing of Native Species) (Flora) Order 2024* for extinct flora.
EW	**Extinct in the Wild** 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). Currently there are no Threatened fauna or Threatened flora species listed as extinct in the wild. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.
Specially protected species Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting 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 species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.	
IA	**International Agreement/ Migratory**

Code	Category
	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. Published as migratory birds protected under an international agreement under Schedule 1 Division 2 of the *Biodiversity Conservation (Listing of Native species) (Fauna) Order 2024.*
CD	**Species of special conservation interest** Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as Threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act). Published as conservation dependent fauna under Schedule 1 Division 1 of the *Biodiversity Conservation (Listing of Native species) (Fauna) Order 2024.*
OS	**Other specially protected species** 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). Published as other specially protected fauna under Schedule 1 Division 3 of the *Biodiversity Conservation (Listing of Native species) (Fauna) Order 2024.*
Priority 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 Fauna or Flora. 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.	
P1	**Priority 1: Poorly-known species** 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 of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.
P2	**Priority 2: Poorly-known species** 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.
P3	**Priority 3: Poorly-known species** 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.
P4	**Priority 4: Rare, Near Threatened and other species in need of monitoring** (a) Rare. Species 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 species are usually represented on conservation lands. (b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as Conservation Dependent. (c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

Code	Category
Commonwealth categories of Threatened species	
EX	**Extinct** Taxa where there is no reasonable doubt that the last member of the species has died.
EW	**Extinct in the Wild** Taxa where it is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or it has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
CR	**Critically Endangered** Taxa that are facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
EN	**Endangered** Taxa which are 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.
VU	**Vulnerable** Taxa which are 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.
CD	**Conservation Dependent** Taxa which are the focus of a specific conservation program the cessation of which would result in the species becoming vulnerable, endangered or critically endangered; or (b) the following subparagraphs are satisfied: (i) the species is a species of fish; (ii) the species is the focus of a plan of management that provides for actions necessary to stop the decline of, and support the recovery of, the species so that its chances of long-term survival in nature are maximised; (iii) the plan of management is in force under a law of the Commonwealth or of a State or Territory; (iv) cessation of the plan of management would adversely affect the conservation status of the species.

Definitions of Conservation Significant Communities

Category Code	Category
State categories of Threatened Ecological Communities (TEC)	
PD	**Presumed Totally Destroyed**
	An ecological community will be listed as Presumed Totally Destroyed if there are no recent records of the community being extant and either of the following applies: • records within the last 50 years have not been confirmed despite thorough searches or known likely habitats or; • all occurrences recorded within the last 50 years have since been destroyed.
CR	**Critically Endangered**
	An ecological community will be listed as Critically Endangered when it has been adequately surveyed and is found to be facing an extremely high risk of total destruction in the immediate future, meeting any one of the following criteria:
	The estimated geographic range and distribution has been reduced by at least 90% and is either continuing to decline with total destruction imminent, or is unlikely to be substantially rehabilitated in the immediate future due to modification;
	The current distribution is limited i.e. highly restricted, having very few small or isolated occurrences, or covering a small area;
	The ecological community is highly modified with potential of being rehabilitated in the immediate future.
EN	**Endangered**
	An ecological community will be listed as Endangered when it has been adequately surveyed and is not Critically Endangered but is facing a very high risk of total destruction in the near future. The ecological community must meet any one of the following criteria:
	The estimated geographic range and distribution has been reduced by at least 70% and is either continuing to decline with total destruction imminent in the short-term future, or is unlikely to be substantially rehabilitated in the short-term future due to modification;
	The current distribution is limited i.e. highly restricted, having very few small or isolated occurrences, or covering a small area;

Category Code	Category
	The ecological community is highly modified with potential of being rehabilitated in the short-term future.
VU	**Vulnerable**
	An ecological community will be listed as Vulnerable when it has been adequately surveyed and is not Critically Endangered or Endangered but is facing high risk of total destruction in the medium to long term future. The ecological community must meet any one of the following criteria:
	The ecological community exists largely as modified occurrences that are likely to be able to be substantially restored or rehabilitated;
	The ecological community may already be modified and would be vulnerable to threatening process, and restricted in range or distribution;
	The ecological community may be widespread but has potential to move to a higher threat category due to existing or impending threatening processes.
Commonwealth categories of Threatened Ecological Communities (TEC)	
CE	**Critically Endangered** If, at that time, an ecological community is facing an extremely high risk of extinction in the wild in the immediate future (indicative timeframe being the next 10 years).
EN	**Endangered** If, at that time, an ecological community is not critically endangered but is facing a very high risk of extinction in the wild in the near future (indicative timeframe being the next 20 years).
VU	**Vulnerable** If, at that time, an ecological community is not critically endangered or endangered, but is facing a high risk of extinction in the wild in the medium–term future (indicative timeframe being the next 50 years).
Priority Ecological Communities	
P1	**Poorly-known ecological communities**
	Ecological communities with apparently few, small occurrences, all or most not actively managed for conservation (e.g. within agricultural or pastoral lands, urban areas, active mineral leases) and for which current threats exist.
P2	**Poorly-known ecological communities**
	Communities that are known from few small occurrences, all or most of which are actively managed for conservation (e.g. within national parks, conservation parks, nature reserves, State forest, un-allocated Crown land, water reserves, etc.) and not under imminent threat of destruction or degradation.
P3	**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 within 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 not be represented in the reserve system, but are under threat of modification across much of their range from processes such as grazing and inappropriate fire regimes.
P4	**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.
P5	**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.

APPENDIX B:
VEGETATION CONDITION RATING

Vegetation Condition Rating	South West and Interzone Botanical Provinces	Eremaean and Northern Botanical Provinces
Pristine	Pristine or nearly so, no obvious signs of disturbance or 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.	Pristine or nearly so, no obvious signs of damage caused by human activities since European settlement.
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.	Some relatively slight signs of damage caused by human activities since European settlement. For example, some signs of damage to tree trunks caused by repeated fire, the presence of some relatively non-aggressive weeds, or occasional vehicle tracks.
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.	More obvious signs of damage caused by human activity since European settlement, including some obvious impact on the vegetation structure such as that caused by low levels of grazing or slightly aggressive weeds.
Poor		Still retains basic vegetation structure or ability to regenerate it after very obvious impacts of human activities since European settlement, such as grazing, partial clearing, frequent fires or aggressive weeds.
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.	Severely impacted by grazing, very frequent fires, clearing or a combination of these activities. Scope for some regeneration but not to a state approaching good condition without intensive management. Usually with a number of weed species present including very aggressive species.
Completely Degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees and shrubs.	Areas that are completely or almost completely without native species in the structure of their vegetation; i.e., areas that are cleared or ‘parkland cleared’ with their flora comprising weed or crop species with isolated native trees or shrubs.

APPENDIX C:
LIST OF FLORA SPECIES IDENTIFIED WITHIN THE MT HOPE SURVEY AREA

Family	Genus	Taxon	CLP-EW1	CLP-EW2	CLP-EW4	CLP-MS1	CLP-MW1	CLP-MW3	CLP-MW4	CLP-REW1	CLP-REW4	CLP-RMW1	HS-EW2	HS-EW3	HS-EW5	HS-REW1	RH-EW3	SLP-MW1	Clear-ed
Aizoaceae	*Carpobrotus*	*modestus*				*													
Aizoaceae	*Disphyma*	*crassifolium*				*													
Amaranthaceae	*Ptilotus*	*holosericeus (A)*	*	*	*			*				*			*				
Apiaceae	*Platysace*	*trachymenioides*	*					*		*	*			*			*	*	
Apocynaceae	*Alyxia*	*buxifolia*		*		*											*		
Asparagaceae	*Lomandra*	*effusa*			*			*	*			*			*				
Asparagaceae	*Thysanotus*	*manglesianus*	*				*	*									*		
Asteraceae	*Asteridea*	*athrixioides*	*	*	*							*		*	*				
Asteraceae	*Centaurea*	*melitensis (W)*		*															
Asteraceae	*Olearia*	*muelleri*	*	*	*		*	*		*							*		
Boraginaceae	*Halgania*	*andromedifolia*		*	*					*	*			*					
Boraginaceae	*Halgania*	*integerrima*					*		*				*		*	*			
Brassicaceae	*Stenopetalum*	*lineare* var. *lineare*	*	*				*				*						*	
Casuarinaceae	*Allocasuarina*	*acutivalvis*											*			*			
Casuarinaceae	*Allocasuarina*	*campestris*						*				*		*				*	
Casuarinaceae	*Allocasuarina*	*helmsii*				*	*										*		
Chenopodiaceae	*Atriplex*	*stipitata* subsp. *stipitata*		*		*				*	*			*	*		*		
Chenopodiaceae	*Maireana*	*marginata*	*	*			*			*	*			*	*		*		
Chenopodiaceae	*Sclerolaena*	*parviflora*	*	*		*	*								*		*		
Chenopodiaceae	*Tecticornia*	*indica subsp. bidens*				*													
Comesperma	*Comesperma*	*volubile*					*			*		*	*		*	*		*	
Convolvulaceae	*Wilsonia*	*humilis*		*		*				*	*	*						*	
Cyperaceae	*Gahnia*	*ancistrophylla*					*		*	*		*		*			*		
Cyperaceae	*Lepidosperma*	*diurnum*		*					*				*			*			
Cyperaceae	*Lepidosperma*	*sanguinolentum*								*			*	*		*	*		
Dilleniaceae	*Hibbertia*	*eatoniae*					*						*					*	
Dilleniaceae	*Hibbertia*	*exasperata*											*						
Dilleniaceae	*Hibbertia*	*rostellata*														*		*	
Droseraceae	*Drosera*	*macrantha*								*			*			*			

Family	Genus	Taxon	CLP-EW1	CLP-EW2	CLP-EW4	CLP-MS1	CLP-MW1	CLP-MW3	CLP-MW4	CLP-REW1	CLP-REW4	CLP-RMW1	HS-EW2	HS-EW3	HS-EW5	HS-REW1	RH-EW3	SLP-MW1	Cleared
Ericaceae	*Styphelia*	*serratifolia*								*		*	*		*			*	
Fabaceae	*Acacia*	*acutata*	*				*									*			
Fabaceae	*Acacia*	*assimilis* subsp. *assimilis*															*	*	
Fabaceae	*Acacia*	*camptoclada*	*	*			*		*										
Fabaceae	*Acacia*	*deficiens*							*	*	*	*					*		
Fabaceae	*Acacia*	*enervia* subsp. *enervia*		*				*					*					*	
Fabaceae	*Acacia*	*erinacea*	*	*	*				*			*			*		*		
Fabaceae	*Acacia*	*hemiteles*	*				*	*	*	*		*		*					
Fabaceae	*Acacia*	*hystrix* subsp. *hystrix*							*	*	*								
Fabaceae	*Acacia*	*intricata*	*	*			*			*				*	*				
Fabaceae	*Acacia*	*lasiocalyx*											*			*		*	
Fabaceae	*Acacia*	*merrallii*		*		*													
Fabaceae	*Acacia*	*poliochroa*								*			*	*			*		
Fabaceae	*Acacia*	*steedmanii* subsp. *steedmanii*											*		*	*			
Fabaceae	*Acacia*	*sulcata var. platyphylla*								*	*	*	*	*		*	*		
Fabaceae	*Acacia*	*tetraptera*					*							*					
Fabaceae	*Acacia*	*verriculum*				*													
Fabaceae	*Acacia*	*merinthophora*											*						
Fabaceae	*Daviesia*	*argillacea*		*						*				*			*		
Fabaceae	*Daviesia*	*benthamii*	*	*			*		*						*				
Fabaceae	*Eutaxia*	*acanthoclada (P3)*								*									
Fabaceae	*Gastrolobium*	*melanocarpum*											*						
Fabaceae	*Gastrolobium*	*parviflorum*	*		*	*	*	*		*									
Fabaceae	*Gastrolobium*	*spinosum*											*		*	*			
Fabaceae	*Gompholobium*	*gompholobioides*	*	*	*			*		*	*				*				
Fabaceae	*Leptosema*	*daviesioides*						*					*	*		*		*	
Fabaceae	*Templetonia*	*ceracea*		*	*		*					*							
Fabaceae	*Templetonia*	*sulcata*	*	*				*		*	*	*		*			*		
Frankeniaceae	*Frankenia*	*cinerea*				*													
Goodeniaceae	*Coopernookia*	*strophiolata*					*						*			*		*	
Goodeniaceae	*Dampiera*	*latealata*											*	*		*		*	
Goodeniaceae	*Goodenia*	*pinnatifida (A)*										*	*	*				*	
Goodeniaceae	*Scaevola*	*spinescens*	*				*	*		*		*		*	*		*		
Haloragaceae	*Glischrocaryon*	*flavescens*					*						*						
Hemerocallidaceae	*Dianella*	*revoluta var. divaricata*	*		*			*				*		*				*	
Lamiaceae	*Lachnostachys*	*bracteosa*											*				*		
Lamiaceae	*Microcorys*	*sp. Forrestania (P4)*			*					*		*							*
Lamiaceae	*Teucrium*	*diabolicum (P3)*																	*
Lamiaceae	*Westringia*	*cephalantha*		*	*		*		*	*			*	*	*	*		*	

Family	Genus	Taxon	CLP-EW1	CLP-EW2	CLP-EW4	CLP-MS1	CLP-MW1	CLP-MW3	CLP-MW4	CLP-REW1	CLP-REW4	CLP-RMW1	HS-EW2	HS-EW3	HS-EW5	HS-REW1	RH-EW3	SLP-MW1	Clear-ed
Lamiaceae	*Westringia*	*rigida*						*	*									*	
Lauraceae	*Cassytha*	*melantha (A)*						*					*		*				
Malvaceae	*Lasiopetalum*	*ferraricollinum*								*	*		*			*	*		
Malvaceae	*Seringia*	*velutina*					*						*					*	
Malvaceae	*Thomasia*	*sarotes*											*					*	
Myrtaceae	*Apectospermum*	*spinescens*					*						*		*			*	
Myrtaceae	*Baeckea*	*elderiana*											*			*		*	
Myrtaceae	*Calothamnus*	*quadrifidus subsp. seminudus*														*			
Myrtaceae	*Eucalyptus*	*calycogona*					*		*			*			*			*	
Myrtaceae	*Eucalyptus*	*cylindriflora*	*				*			*	*						*		
Myrtaceae	*Eucalyptus*	*cylindrocarpa*		*			*					*							
Myrtaceae	*Eucalyptus*	*livida*											*	*	*			*	
Myrtaceae	*Eucalyptus*	*longicornis*		*			*			*	*			*		*	*		
Myrtaceae	*Eucalyptus*	*loxophleba subsp. lissophloia*					*	*				*					*	*	
Myrtaceae	*Eucalyptus*	*pileata*	*	*								*						*	
Myrtaceae	*Eucalyptus*	*salmonophloia*	*	*						*	*			*	*				
Myrtaceae	*Eucalyptus*	*tenera*			*		*					*		*				*	
Myrtaceae	*Eucalyptus*	*urna*		*			*			*	*			*					
Myrtaceae	*Eucalyptus*	*yilgarnensis*			*	*		*							*				
Myrtaceae	*Leptospermopsis*	*erubescens*					*					*						*	
Myrtaceae	*Leptospermopsis*	*roei*					*		*				*					*	
Myrtaceae	*Melaleuca*	*acuminata* subsp. *acuminata*	*					*		*					*			*	
Myrtaceae	*Melaleuca*	*adnata*	*		*				*	*	*								
Myrtaceae	*Melaleuca*	*atroviridis*				*				*	*				*				
Myrtaceae	*Melaleuca*	*cucullata*				*	*								*				
Myrtaceae	*Melaleuca*	*eleuterostachya*	*				*		*	*								*	
Myrtaceae	*Melaleuca*	*hamata*					*					*	*	*		*		*	
Myrtaceae	*Melaleuca*	*lateriflora*		*		*	*											*	
Myrtaceae	*Melaleuca*	*pauperiflora*		*			*			*	*		*		*		*		
Myrtaceae	*Melaleuca*	*thyoides*				*	*								*				
Myrtaceae	*Thryptomene*	*kochii*					*						*			*		*	
Myrtaceae	*Verticordia*	*inclusa*							*				*	*				*	
Orchidaceae	*Ericksonella*	*saccharata*		*				*					*	*					
Orchidaceae	*Thelymitra*	*petrophila*		*				*				*						*	
Poaceae	*Austrostipa*	*elegantissima*	*	*		*	*			*	*				*		*		
Poaceae	*Triodia*	*scariosa*							*			*	*						
Proteaceae	*Banksia*	*elderiana*											*					*	

Family	Genus	Taxon	CLP-EW1	CLP-EW2	CLP-EW4	CLP-MS1	CLP-MW1	CLP-MW3	CLP-MW4	CLP-REW1	CLP-REW4	CLP-RMW1	HS-EW2	HS-EW3	HS-EW5	HS-REW1	RH-EW3	SLP-MW1	Clear-ed
Proteaceae	*Banksia*	*erythrocephala* var. *erythrocephala*											*				*	*	
Proteaceae	*Grevillea*	*acuaria*	*	*	*		*		*	*	*	*			*				
Proteaceae	*Grevillea*	*huegelii*						*	*	*									
Proteaceae	*Grevillea*	*oncogyne*	*				*	*	*	*									
Proteaceae	*Hakea*	*cygnus* subsp. *cygus*										*						*	
Proteaceae	*Hakea*	*kippistiana*										*	*	*				*	
Proteaceae	*Hakea*	*subsulcata*											*					*	
Rhamnaceae	*Cryptandra*	*myriantha*							*	*		*							
Rhamnaceae	*Stenanthemum*	*stipulosum*											*				*	*	
Rhamnaceae	*Trymalium*	*myrtillus* subsp. *myrtillus*						*					*				*		
Rutaceae	*Phebalium*	*filifolium*											*	*		*		*	
Rutaceae	*Phebalium*	*pauciflorum*							*				*					*	
Rutaceae	*Boronia*	*inornata* subsp. *inornata*		*		*				*	*			*					
Rutaceae	*Drummondita*	*hassellii*														*		*	
Santalaceae	*Santalum*	*acuminatum*		*					*			*	*	*				*	
Sapindaceae	*Dodonaea*	*bursariifolia*						*	*			*		*			*		
Sapindaceae	*Dodonaea*	*stenozyga*		*								*					*		
Scrophulariaceae	*Eremophila*	*decipiens* subsp. *decipiens*		*				*		*		*		*			*		
Scrophulariaceae	*Eremophila*	*densifolia* subsp. *capitata*										*							
Scrophulariaceae	*Eremophila*	*glabra*						*	*	*									
Scrophulariaceae	*Eremophila*	*ionantha*		*		*		*	*	*				*	*				
Scrophulariaceae	*Eremophila*	*psilocalyx*	*		*						*			*					
Stylidiaceae	*Stylidium*	*dielsianum*								*					*	*			
Violaceae	*Pigea*	*floribunda*					*		*									*	
Zygophyllaceae	*Roepera*	*glauca (A)*	*	*	*					*	*	*		*	*		*		

(P)Priority Species (A) Annual Species (W) Weed Species

APPENDIX D:
LIST OF FLORA SPECIES IDENTIFIED WITHIN THE CROSSROADS SURVEY AREA

Family	Genus	Taxon	CD-MF1	CLP EW1	CLP-EW2	CLP-EW3	CLP-MW1	CLP-REW1	CLP-REW2	CLP-RMW1	HS-EW1	HS-EW2	HS-MW1	HS-MW2	HS-REW1	RH-EW1	RH-REW1	RS-MW1	Clear-ed
Apiaceae	*Platysace*	*maxwellii*		*			*	*			*	*		*			*	*	
Asparagaceae	*Thysanotus*	*dichotomus*	*				*									*			
Poaceae	*Austrostipa*	sp. (sterile)	*	*	*	*	*	*	*	*					*	*		*	*
Aizoaceae	*Disphyma*	*crassifolium* subsp. *clavellatum*	*		*														
Asphodelaceae	*Bulbine*	*semibarbata*	*	*		*										*			
Asteraceae	*Angianthus*	*tomentosus* (A)		*			*		*	*		*							*
Asteraceae	*Calotis*	*hispidula* (A)		*				*								*			*
Asteraceae	*Dittrichia*	*graveolens* (W)		*			*												*
Asteraceae	*Gnephosis*	*tenuissima* (A)		*															
Asteraceae	*Olearia*	*muelleri*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
Asteraceae	*Olearia*	*pimeleoides*		*					*	*									
Casuarinaceae	*Allocasuarina*	*helmsii*		*							*		*	*				*	
Chenopodiaceae	*Atriplex*	*stipitata*		*	*	*	*	*				*			*	*		*	
Chenopodiaceae	*Atriplex*	*vesicaria*				*					*				*			*	
Chenopodiaceae	*Maireana*	*oppositifolia*		*				*				*				*			
Chenopodiaceae	*Sclerolaena*	*uniflora*		*	*	*		*					*						
Convolvulaceae	*Wilsonia*	*humilis*	*	*	*	*		*	*	*	*		*		*			*	
Cyperaceae	*Gahnia*	*ancistrophylla*					*			*	*			*					
Cyperaceae	*Lepidosperma*	*sanguinolentum*					*						*	*			*		
Dilleniaceae	*Hibbertia*	*eatoniae*									*			*			*		
Dilleniaceae	*Hibbertia*	*exasperata*					*			*	*			*					
Ericaceae	*Leucopogon*	*cuneifolius*	*										*	*			*		
Ericaceae	*Leucopogon*	*sp. outer wheatbelt (M. Hislop 30)*															*		
Ericaceae	*Lysinema*	*ciliatum*				*								*			*		
Ericaceae	*Lysinema*	*pentapetalum*								*	*								
Fabaceae	*Acacia*	*acanthoclada* subsp. *acanthoclada*	*	*		*	*	*				*				*	*		
Fabaceae	*Acacia*	*acuaria*			*						*			*		*			
Fabaceae	*Acacia*	*acuminata*		*				*				*	*	*			*		

Family	Genus	Taxon	CD-MF1	CLP EW1	CLP-EW2	CLP-EW3	CLP-MW1	CLP-REW1	CLP-REW2	CLP-RMW1	HS-EW1	HS-EW2	HS-MW1	HS-MW2	HS-REW1	RH-EW1	RH-REW1	RS-MW1	Clear-ed
Fabaceae	*Acacia*	*assimilis* subsp. *assimilis*				*								*			*		
Fabaceae	*Acacia*	*camptoclada*	*	*		*	*			*	*		*				*		
Fabaceae	*Acacia*	*colletioides*													*			*	
Fabaceae	*Acacia*	*deficiens*	*	*	*	*	*		*	*			*				*		
Fabaceae	*Acacia*	*densiflora*		*				*											
Fabaceae	*Acacia*	*enervia* subsp. *enervia*		*							*					*	*		
Fabaceae	*Acacia*	*erinacea*	*	*	*		*	*	*	*	*		*				*		
Fabaceae	*Acacia*	*evenulosa*		*					*	*						*			
Fabaceae	*Acacia*	*hemiteles*	*	*	*	*	*	*	*	*	*		*		*		*	*	
Fabaceae	*Acacia*	*hystrix* subsp. *hystrix*				*							*						
Fabaceae	*Acacia*	*intricata*	*	*	*		*		*	*			*						
Fabaceae	*Acacia*	*merrallii*		*	*	*		*	*	*			*		*			*	
Fabaceae	*Acacia*	*poliochroa*	*	*					*	*		*	*						
Fabaceae	*Acacia*	*steedmanii* subsp. *steedmanii*	*	*			*				*		*	*			*		
Fabaceae	*Acacia*	*sulcata*				*	*	*					*						
Fabaceae	*Acacia*	*uncinella*	*	*															
Fabaceae	*Daviesia*	*benthamii* subsp. *acanthoclona*	*	*	*			*	*	*			*				*		
Fabaceae	*Daviesia*	*lancifolia*											*				*		
Fabaceae	*Daviesia*	*nematophylla*		*	*			*	*	*			*		*				
Fabaceae	*Eutaxia*	*acanthoclada* (P3)		*			*		*				*					*	
Fabaceae	*Eutaxia*	*neurocalyx*															*	*	
Fabaceae	*Gastrolobium*	*spinosum*											*				*	*	
Fabaceae	*Gastrolobium*	*tetragonophyllum*					*					*		*		*			
Fabaceae	*Gastrolobium*	*trilobum*												*		*			
Fabaceae	*Gompholobium*	*gompholobioides*	*	*	*	*	*	*	*	*	*								
Fabaceae	*Pultenaea*	*arida*						*					*						
Fabaceae	*Senna*	*artemisioides* subsp. *×artemisioides*						*				*			*				
Fabaceae	*Senna*	*artemisioides* subsp. *filifolia*		*		*	*	*	*	*	*								
Fabaceae	*Senna*	*cardiosperma*		*								*							
Fabaceae	*Templetonia*	*egena*						*					*						
Fabaceae	*Templetonia*	*sulcata*	*		*	*	*		*			*		*					
Goodeniaceae	*Dampiera*	*angulata*					*				*		*	*			*	*	
Goodeniaceae	*Goodenia*	*pinifolia*			*		*		*				*				*	*	
Goodeniaceae	*Scaevola*	*spinescens*			*	*	*	*				*			*	*	*	*	
Hemerocallidaceae	*Dianella*	*revoluta*		*	*		*		*				*			*	*	*	
Lamiaceae	*Microcorys*	sp. Forrestania (V. English 2004) (P4)							*	*									*

Family	Genus	Taxon	CD-MF1	CLP EW1	CLP-EW2	CLP-EW3	CLP-MW1	CLP-REW1	CLP-REW2	CLP-RMW1	HS-EW1	HS-EW2	HS-MW1	HS-MW2	HS-REW1	RH-EW1	RH-REW1	RS-MW1	Clear-ed
Lamiaceae	*Teucrium*	diabolicum (P3)									*								
Lamiaceae	*Westringia*	*cephalantha* var. *caterva*	*	*	*	*	*	*	*	*			*	*			*	*	
Lamiaceae	*Westringia*	*rigida*		*	*				*	*		*		*		*	*	*	
Lauraceae	*Cassytha*	*melantha (A)*	*	*	*		*					*	*					*	
Lauraceae	*Cassytha*	*pomiformis (A)*											*					*	
Malvaceae	*Thomasia*	*sarotes*												*				*	
Myrtaceae	*Calothamnus*	*quadrifidus* subsp. *seminudus*												*			*	*	
Myrtaceae	*Chamelaucium*	*ciliatum*															*	*	
Myrtaceae	*Cyathostemon*	*tenuifolius*	*				*	*			*			*			*	*	
Myrtaceae	*Eucalyptus*	*astringens*							*			*							
Myrtaceae	*Eucalyptus*	*calycogona* subsp. *calycogona*		*		*	*	*											
Myrtaceae	*Eucalyptus*	*celastroides* subsp. *virella*					*	*	*	*									
Myrtaceae	*Eucalyptus*	*cylindriflora*							*				*						
Myrtaceae	*Eucalyptus*	*cylindrocarpa*		*	*				*	*			*						
Myrtaceae	*Eucalyptus*	*kondininensis*		*									*						
Myrtaceae	*Eucalyptus*	*longicornis*				*									*				
Myrtaceae	*Eucalyptus*	*melanoxylon*		*		*		*											
Myrtaceae	*Eucalyptus*	*pileata*					*		*	*			*						
Myrtaceae	*Eucalyptus*	*platycorys*		*															
Myrtaceae	*Eucalyptus*	*polita*	*	*					*				*						
Myrtaceae	*Eucalyptus*	*salmonophloia*	*	*	*	*		*	*		*		*						
Myrtaceae	*Eucalyptus*	*salubris*	*	*	*	*		*	*				*						
Myrtaceae	*Eucalyptus*	*tephroclada*	*				*		*				*	*			*	*	
Myrtaceae	*Eucalyptus*	*transcontinentalis*						*	*				*						
Myrtaceae	*Eucalyptus*	*urna*		*	*		*		*		*		*	*		*			
Myrtaceae	*Melaleuca*	*acuminata*											*						
Myrtaceae	*Melaleuca*	*adnata*	*	*	*	*	*	*	*		*	*	*				*	*	
Myrtaceae	*Melaleuca*	*calyptrioides*	*	*								*	*				*	*	
Myrtaceae	*Melaleuca*	*cardiophylla*	*	*	*								*				*		
Myrtaceae	*Melaleuca*	*cordata*											*	*			*	*	
Myrtaceae	*Melaleuca*	*cucullata*	*	*		*			*				*						
Myrtaceae	*Melaleuca*	*eleuterostachya*	*	*		*	*		*				*				*	*	
Myrtaceae	*Melaleuca*	*elliptica*		*						*			*	*					
Myrtaceae	*Melaleuca*	*hamata*	*		*		*		*				*				*	*	
Myrtaceae	*Melaleuca*	*lateriflora* subsp. *lateriflora*	*		*						*			*			*	*	
Myrtaceae	*Melaleuca*	*pauperiflora* subsp. *fastigiata*	*	*	*		*	*	*	*					*	*	*	*	

Family	Genus	Taxon	CD-MF1	CLP EW1	CLP-EW2	CLP-EW3	CLP-MW1	CLP-REW1	CLP-REW2	CLP-RMW1	HS-EW1	HS-EW2	HS-MW1	HS-MW2	HS-REW1	RH-EW1	RH-REW1	RS-MW1	Clear-ed
Myrtaceae	*Melaleuca*	*pauperiflora* subsp. *pauperiflora*	*	*		*	*		*	*		*	*		*		*	*	
Myrtaceae	*Melaleuca*	*quadrifaria*						*				*	*		*				
Myrtaceae	*Melaleuca*	*sapientes*											*	*			*	*	
Myrtaceae	*Melaleuca*	*sparsiflora*		*		*							*						
Myrtaceae	*Melaleuca*	*teuthidoides*		*	*				*								*	*	
Myrtaceae	*Melaleuca*	*thyoides*		*			*	*					*	*			*	*	
Proteaceae	*Grevillea*	*acuaria*	*	*	*	*	*	*	*			*	*			*	*	*	
Proteaceae	*Grevillea*	*decipiens*															*	*	
Proteaceae	*Grevillea*	*huegelii*		*	*				*				*		*				
Proteaceae	*Grevillea*	*oligantha*		*															
Proteaceae	*Grevillea*	*oncogyne*			*	*		*				*	*				*	*	
Proteaceae	*Grevillea*	*pterosperma*											*				*	*	
Proteaceae	*Hakea*	*commutata*		*									*	*					
Proteaceae	*Hakea*	*corymbosa*		*			*	*									*	*	
Proteaceae	*Hakea*	*kippistiana*												*			*	*	
Proteaceae	*Hakea*	*scoparia* subsp. *scoparia*					*						*	*			*	*	
Proteaceae	*Hakea*	*subsulcata*	*				*				*			*			*	*	
Rhamnaceae	*Cryptandra*	*aridicola*			*	*			*										
Rhamnaceae	*Cryptandra*	*intonsa*			*							*				*			
Rhamnaceae	*Trymalium*	*myrtillus*	*									*				*			
Rutaceae	*Boronia*	*inornata* subsp. *inornata*	*		*	*		*					*				*	*	
Rutaceae	*Phebalium*	*ambiguum*											*	*			*	*	
Rutaceae	*Phebalium*	*filifolium*	*				*							*			*	*	
Santalaceae	*Exocarpos*	*aphyllus*	*	*	*	*	*		*	*			*	*			*	*	
Santalaceae	*Exocarpos*	*sparteus*					*						*	*					
Santalaceae	*Santalum*	*acuminatum*	*	*	*		*	*	*	*			*	*	*		*	*	
Santalaceae	*Santalum*	*murrayanum*				*								*		*			
Sapindaceae	*Dodonaea*	*bursariifolia*	*		*		*		*	*			*				*	*	
Scrophulariaceae	*Eremophila*	*decipiens* subsp. *decipiens*	*	*	*	*		*	*	*	*	*		*		*			
Scrophulariaceae	*Eremophila*	*densifolia*		*	*			*					*						
Scrophulariaceae	*Eremophila*	*maculata*		*	*			*	*	*		*			*	*			

(P) Priority Species (A) Annual Species (W) Weed Species

APPENDIX E:
LIST OF FLORA SPECIES IDENTIFIED WITHIN THE HATTERS AND SLOWDIVE SURVEY AREA

Family	Genus	Taxon	CLP-REW1	CLP-REW2	CLP-RMW1	HS-EW1	HS-REW1	RS-RMW1
Fabaceae	*Acacia*	*camptoclada*			*		*	
Fabaceae	*Acacia*	*castanostegia*		*		*		*
Fabaceae	*Acacia*	*enervia*		*	*			
Fabaceae	*Acacia*	*erinacea*	*				*	*
Fabaceae	*Acacia*	*hadrophylla*	*					
Fabaceae	*Acacia*	*intricata*			*			
Fabaceae	*Acacia*	*mutabilis subsp. mutabilis*		*				*
Fabaceae	*Acacia*	*sulcata var. platyphylla*	*	*				
Casuarinaceae	*Allocasuarina*	*acutivalvis*						
Casuarinaceae	*Allocasuarina*	*campestris*		*	*			*
Casuarinaceae	*Allocasuarina*	*corniculata*		*		*		
Euphorbiaceae	*Beyeria*	*brevifolia*	*					
Euphorbiaceae	*Beyeria*	*sulcata var. brevipes*		*				
Rutaceae	*Boronia*	*inornata subsp. leptophylla*	*		*			
Asphodelaceae	*Bulbine*	*semibarbata (A)*		*				
Cupressaceae	*Callitris*	*canescens*			*			
Cupressaceae	*Callitris*	*preissii*						
Myrtaceae	*Calothamnus*	*quadrifidus*		*	*		*	*
Lauraceae	*Cassytha*	*melantha (A)*			*			
Cycadaceae	*Conostylis*	*argentea*						
Goodeniaceae	*Dampiera*	*angulata subsp. Peak*						
Apiaceae	*Daucus*	*glochidiatus (A)*		*				
Fabaceae	*Daviesia*	*aphylla*			*			
Fabaceae	*Daviesia*	*benthamii*	*	*				
Fabaceae	*Daviesia*	*euryloba*				*	*	
Fabaceae	*Daviesia*	*lancifolia*						*
Fabaceae	*Daviesia*	*nematophylla*	*		*			
Hemerocallidaceae	*Dianella*	*revoluta*			*			*
Droseraceae	*Drosera*	*macrantha*		*				

Family	Genus	Taxon	CLP-REW1	CLP-REW2	CLP-RMW1	HS-EW1	HS-REW1	RS-RMW1
Rutaceae	*Drummondita*	*hassellii*		*	*			
Myrtaceae	*Eucalyptus*	*aspratilis*	*			*	*	
Myrtaceae	*Eucalyptus*	*calycogana*	*					
Myrtaceae	*Eucalyptus*	*cylindrocarpa*			*			
Myrtaceae	*Eucalyptus*	*horistes*						
Myrtaceae	*Eucalyptus*	*incerata*			*			
Myrtaceae	*Eucalyptus*	*livida*			*			
Myrtaceae	*Eucalyptus*	*luteola*						
Myrtaceae	*Eucalyptus*	*rigidula* subsp. *rigidula*			*			
Myrtaceae	*Eucalyptus*	*salmonophloia*	*					
Myrtaceae	*Eucalyptus*	*salubris*		*				
Myrtaceae	*Eucalyptus*	*urna*			*		*	*
Euphorbiaceae	*Euphorbia*	*australis (A)*		*		*		
Cyperaceae	*Gahnia*	*ancistrophylla*				*		
Fabaceae	*Gastrolobium*	*crassifolium*						
Fabaceae	*Gastrolobium*	*parviflorum*	*		*			
Fabaceae	*Gastrolobium*	*spinosum*		*		*		
Fabaceae	*Gompholobium*	*gompholobioides*			*		*	
Goodeniaceae	*Goodenia*	*pinifolia*			*	*		
Goodeniaceae	*Goodenia*	*scapigera*		*				
Proteaceae	*Grevillea*	*acuaria*		*				
Proteaceae	*Grevillea*	*cagiana*						
Proteaceae	*Grevillea*	*oncogyne*	*	*				*
Proteaceae	*Grevillea*	*lullfitzii (P1)*	*			*	*	*
Proteaceae	*Hakea*	*corymbosa*		*				
Ericaceae	*Hakea*	*cygna* subsp. *cygna*	*		*	*	*	
Ericaceae	*Hakea*	*scoparia*	*					
Lamiaceae	*Hemigenia*	*teretiuscula*		*				*
Dilleniaceae	*Hibbertia*	*exasperata*			*			*
Dilleniaceae	*Hibbertia*	*gracilipes*		*	*	*	*	
Asparagaceae	*Laxmannia*	*brachyphylla*						*
Cyperaceae	*Lepidosperma*	*amantiferrum*		*	*		*	
Cyperaceae	*Lepidosperma*	*sanguinolentum*				*		
Myrtaceae	*Leptospermopsis*	*nitens*			*			
Myrtaceae	*Leptospermum*	*aff. erubescens*						*
Ericaceae	*Leucopogon*	*dielsianus*					*	
Ericaceae	*Leucopogon*	*obtusatus*						*
Ericaceae	*Leucopogon*	*sp. Coujinup*				*	*	
Ericaceae	*Leucopogon*	*sp. outer wheatbelt*						*
Asparagaceae	*Lomandra*	*effusa*						

Family	Genus	Taxon	CLP-REW1	CLP-REW2	CLP-RMW1	HS-EW1	HS-REW1	RS-RMW1
Myrtaceae	*Melaleuca*	*acuminata*					*	
Myrtaceae	*Melaleuca*	*adnata*			*		*	*
Myrtaceae	*Melaleuca*	*calyptroides*			*		*	*
Myrtaceae	*Melaleuca*	*cordata*		*	*			
Myrtaceae	*Melaleuca*	*cucullata*	*					
Myrtaceae	*Melaleuca*	*eleuterostachya*	*				*	
Myrtaceae	*Melaleuca*	*hamata*		*	*			*
Myrtaceae	*Melaleuca*	*johnsonii*					*	
Myrtaceae	*Melaleuca*	*lateriflora*	*	*				*
Myrtaceae	*Melaleuca*	*laxiflora*						
Myrtaceae	*Melaleuca*	*pauperiflora*	*	*			*	
Myrtaceae	*Melaleuca*	*pentagona*						*
Myrtaceae	*Melaleuca*	*pungens*		*	*			
Myrtaceae	*Melaleuca*	*sapientes*			*			
Rutaceae	*Microcybe*	*multiflora*		*				
Fabaceae	*Mirbelia*	*trichocalyx*						*
Asteraceae	*Olearia*	*muelleri*	*			*	*	*
Lamiaceae	*Prostanthera*	*serpyllifolia* subsp. *microphylla*	*					
Cyperaceae	*Schoenus*	*calcatus*				*		
Fabaceae	*Senna*	*artemisioides*		*		*	*	*
Asteraceae	*Siloxerus*	*Multiflorus (A)*			*			
Ericaceae	*Styphelia*	*lissanthoides*		*				
Asparagaceae	*Thysanotus*	*manglesianus*			*		*	
Lamiaceae	*Westringia*	*cephalantha*			*	*	*	*

(P)Priority Species (A) Annual Species

APPENDIX F:
LIST OF FAUNA SPECIES OBSERVED IN THE SURVEY AREA

Class	Family	Taxon	Common Name	Conservation Status
Aves	Acanthizidae	*Acanthiza apicalis*	Inland thornbill	LC
	Acanthizidae	*Calamanthus fuliginosus*	Striated field wren	LC
	Campephagidae	*Coracina novaehollandiae*	Black-faced Cuckoo-shrike	LC
	Casuariidae	*Dromaius novaehollandiae*	Emu	LC
	Columbidae	*Phaps chalcoptera*	Common Bronzewing	LC
	Corvidae	*Corvus coronoides*	Australian raven	LC
	Falconidae	*Falco cenchroides*	Nankean Kestrel	LC
	Maluridae	*Malurus pulcherrimus*	Blue-breasted fairywren	LC
	Meliphagidae	*Acanthagenys rufogularis*	Spiny-cheeked honeyeater	LC
	Meliphagidae	*Anthochaera carunculata*	Red wattlebird	LC
	Meliphagidae	*Manorina flavigula*	Yellow-throated miner	LC
	Oreoicidae	*Oreoica gutturalis*	Crested bellbird	LC
	Pachycephalidae	*Colluricincla harmonica*	Grey-shrike Thrush	LC
	Pardalotidae	*Pardalotus striatus*	Striated pardalote	LC
	Psittacidae	*Barnardius zonarius*	Australian Ringneck	LC
	Turnicidae	*Turnix velox*	Little Burron Quail	LC
Mammals	Macropodidae	*Macropus fuliginosus*	Western grey kangaroo (scats)	LC
Reptiles	Agamidae	*Ctenophorus cristatus*	Bicycle dragon	LC
	Agamidae	*Ctenophorus maculatus griseus*	Military Dragon	LC
	Carphodactylidae	*Underwoodisaurus milii*	Southern Barking Gecko	LC
	Elapidae	*Pseudonaja affinis*	Dugite	LC
	Varanidae	*Varanus gouldii*	Sand goanna	LC

BC Act Status/EPBC Act Status - CR = Critically Endangered, EN = Endangered, VU = Vulnerable, EX = Extinct, Mig = Migratory, DBCA Priority Status - P1 to P4, Int. Agmts - CA = CAMBA, JA = JAMBA, RK = ROKAMBA, IUCN Red List Category Definitions LC = Least Concern, NT = Near Threatened - see https://www.iucnredlist.org/resources/categories-and-criteria for others

APPENDIX G:
PRIORITY FLORA OBSERVED IN THE SURVEY AREA (GDA 2020)

Taxon Name	Cons Status	Zone	Easting	Northing	Abundance	Site
Eremophila inflata	P4	50H	760061	6438882	20	Mt Hope
Eremophila inflata	P4	50H	760069	6438932	100	Mt Hope
Eremophila inflata	P4	50H	760069	6438933	1	Mt Hope
Eutaxia acanthoclada	P3	50H	756518	6407979	120	Crossroads
Eutaxia acanthoclada	P3	50H	756517	6407981	120	Crossroads
Eutaxia acanthoclada	P3	50H	760372	6438969	1	Mt Hope
Eutaxia acanthoclada	P3	50H	756570	6411012	1	Crossroads
Eutaxia acanthoclada	P3	50H	756569	6411065	1	Crossroads
Eutaxia acanthoclada	P3	50H	757224	6411603	1	Crossroads
Eutaxia acanthoclada	P3	50H	757229	6411603	1	Crossroads
Eutaxia acanthoclada	P3	50H	757235	6411602	1	Crossroads
Eutaxia acanthoclada	P3	50H	757266	6411603	1	Crossroads
Eutaxia acanthoclada	P3	50H	757679	6411566	1	Crossroads
Eutaxia acanthoclada	P3	50H	754545	6406422	1	Crossroads
Eutaxia acanthoclada	P3	50H	754560	6406418	1	Crossroads
Eutaxia acanthoclada	P3	50H	754560	6406417	1	Crossroads
Eutaxia acanthoclada	P3	50H	754577	6406415	1	Crossroads
Eutaxia acanthoclada	P3	50H	754628	6406401	1	Crossroads
Eutaxia acanthoclada	P3	50H	754631	6406398	1	Crossroads
Eutaxia acanthoclada	P3	50H	754636	6406394	1	Crossroads
Eutaxia acanthoclada	P3	50H	754650	6406394	1	Crossroads
Eutaxia acanthoclada	P3	50H	754651	6406394	1	Crossroads
Eutaxia acanthoclada	P3	50H	754657	6406390	1	Crossroads
Eutaxia acanthoclada	P3	50H	754665	6406389	1	Crossroads
Eutaxia acanthoclada	P3	50H	754674	6406389	1	Crossroads
Eutaxia acanthoclada	P3	50H	754680	6406390	1	Crossroads
Eutaxia acanthoclada	P3	50H	754680	6406390	1	Crossroads
Eutaxia acanthoclada	P3	50H	754681	6406390	1	Crossroads
Eutaxia acanthoclada	P3	50H	754687	6406390	1	Crossroads
Eutaxia acanthoclada	P3	50H	754688	6406390	1	Crossroads
Eutaxia acanthoclada	P3	50H	754688	6406389	1	Crossroads
Eutaxia acanthoclada	P3	50H	754691	6406388	1	Crossroads
Eutaxia acanthoclada	P3	50H	754692	6406388	1	Crossroads
Eutaxia acanthoclada	P3	50H	754693	6406387	1	Crossroads
Eutaxia acanthoclada	P3	50H	754694	6406387	1	Crossroads
Eutaxia acanthoclada	P3	50H	754694	6406386	1	Crossroads
Eutaxia acanthoclada	P3	50H	754695	6406386	1	Crossroads
Eutaxia acanthoclada	P3	50H	754696	6406386	1	Crossroads
Eutaxia acanthoclada	P3	50H	754736	6406402	1	Crossroads

Eutaxia acanthoclada	P3	50H	754770	6406422	1	Crossroads
Eutaxia acanthoclada	P3	50H	754827	6406413	1	Crossroads
Eutaxia acanthoclada	P3	50H	754842	6406407	1	Crossroads
Eutaxia acanthoclada	P3	50H	754847	6406404	1	Crossroads
Eutaxia acanthoclada	P3	50H	754848	6406404	1	Crossroads
Eutaxia acanthoclada	P3	50H	754849	6406405	1	Crossroads
Eutaxia acanthoclada	P3	50H	754849	6406405	1	Crossroads
Eutaxia acanthoclada	P3	50H	754912	6406413	1	Crossroads
Eutaxia acanthoclada	P3	50H	754913	6406413	1	Crossroads
Eutaxia acanthoclada	P3	50H	754913	6406413	1	Crossroads
Eutaxia acanthoclada	P3	50H	754913	6406413	1	Crossroads
Eutaxia acanthoclada	P3	50H	754914	6406413	1	Crossroads
Eutaxia acanthoclada	P3	50H	754915	6406414	1	Crossroads
Eutaxia acanthoclada	P3	50H	754979	6406421	1	Crossroads
Eutaxia acanthoclada	P3	50H	754983	6406421	1	Crossroads
Eutaxia acanthoclada	P3	50H	754984	6406421	1	Crossroads
Eutaxia acanthoclada	P3	50H	754984	6406421	1	Crossroads
Eutaxia acanthoclada	P3	50H	755027	6406421	1	Crossroads
Eutaxia acanthoclada	P3	50H	755067	6406406	1	Crossroads
Eutaxia acanthoclada	P3	50H	755074	6406407	1	Crossroads
Eutaxia acanthoclada	P3	50H	755076	6406406	1	Crossroads
Eutaxia acanthoclada	P3	50H	755079	6406402	1	Crossroads
Eutaxia acanthoclada	P3	50H	755093	6406401	1	Crossroads
Eutaxia acanthoclada	P3	50H	755098	6406404	1	Crossroads
Eutaxia acanthoclada	P3	50H	755115	6406401	1	Crossroads
Eutaxia acanthoclada	P3	50H	755117	6406401	1	Crossroads
Eutaxia acanthoclada	P3	50H	755119	6406402	1	Crossroads
Eutaxia acanthoclada	P3	50H	755130	6406404	1	Crossroads
Eutaxia acanthoclada	P3	50H	755131	6406404	1	Crossroads
Eutaxia acanthoclada	P3	50H	755131	6406405	1	Crossroads
Eutaxia acanthoclada	P3	50H	755131	6406405	1	Crossroads
Eutaxia acanthoclada	P3	50H	755157	6406414	1	Crossroads
Eutaxia acanthoclada	P3	50H	755160	6406415	1	Crossroads
Eutaxia acanthoclada	P3	50H	755306	6406407	1	Crossroads
Eutaxia acanthoclada	P3	50H	755336	6406401	1	Crossroads
Eutaxia acanthoclada	P3	50H	755477	6406417	1	Crossroads
Grevillea lullfitzii	P1	51H	220444	6361112	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220444	6361111	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220445	6361111	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220468	6361128	1	Hatters Hill

Grevillea lullfitzii	P1	51H	220470	6361130	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220471	6361130	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220471	6361130	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220472	6361130	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220485	6361138	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220487	6361139	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220502	6361146	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220508	6361149	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220518	6361156	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220529	6361161	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220536	6361165	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220537	6361166	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220549	6361176	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220549	6361177	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220550	6361177	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220551	6361178	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220551	6361178	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220551	6361178	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220571	6361189	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220572	6361189	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220276	6361968	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220281	6361967	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220282	6361967	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220283	6361967	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220283	6361967	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220284	6361967	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220306	6361970	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220313	6361976	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220316	6361979	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220318	6361958	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220318	6361958	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220317	6361958	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220316	6361958	1	Hatters Hill
Grevillea lullfitzii	P1	51H	220220	6361910	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219333	6362854	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219335	6362857	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219337	6362860	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219338	6362862	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219345	6362871	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219384	6362915	1	Hatters Hill

Grevillea lullfitzii	P1	51H	219384	6362916	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219386	6362917	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219405	6362943	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219406	6362944	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219413	6362954	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219647	6363211	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219372	6363549	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219374	6363551	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219401	6363591	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219401	6363591	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219401	6363592	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219401	6363592	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219401	6363593	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219401	6363593	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219401	6363595	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219390	6363613	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219390	6363613	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219389	6363613	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219388	6363613	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219387	6363613	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219387	6363614	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219387	6363614	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219328	6363639	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219328	6363639	1	Hatters Hill
Grevillea lullfitzii	P1	51H	219327	6363639	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780611	6363064	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780611	6363064	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780611	6363064	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780612	6363065	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780613	6363066	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780613	6363066	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780614	6363066	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780613	6363067	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780613	6363067	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780718	6363155	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780764	6363219	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780782	6363250	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780812	6363516	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780808	6363502	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780808	6363501	1	Hatters Hill

Grevillea lullfitzii	P1	50H	780808	6363501	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780808	6363501	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780808	6363500	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780808	6363500	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780808	6363499	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780808	6363499	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780808	6363496	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780807	6363495	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780807	6363494	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780806	6363492	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780802	6363486	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780802	6363486	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780799	6363482	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780799	6363482	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780799	6363482	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780798	6363481	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780797	6363479	1	Hatters Hill
Grevillea lullfitzii	P1	50H	780782	6363472	1	Hatters Hill
Grevillea neodissecta	P4	50H	762486	6437294	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	755120	6401103	1	Crossroads
Microcorys sp. Forrestania (V. English 2004)	P4	50H	754947	6400774	120	Crossroads
Microcorys sp. Forrestania (V. English 2004)	P4	50H	754778	6400764	1	Crossroads
Microcorys sp. Forrestania (V. English 2004)	P4	50H	754765	6400770	1	Crossroads
Microcorys sp. Forrestania (V. English 2004)	P4	50H	754763	6400771	1	Crossroads
Microcorys sp. Forrestania (V. English 2004)	P4	50H	754762	6400772	1	Crossroads
Microcorys sp. Forrestania (V. English 2004)	P4	50H	754756	6400779	1	Crossroads
Microcorys sp. Forrestania (V. English 2004)	P4	50H	754735	6400800	1	Crossroads
Microcorys sp. Forrestania (V. English 2004)	P4	50H	762511	6436900	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	762514	6436901	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	762515	6436901	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	762516	6436900	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	762524	6436902	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	762525	6436902	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	762526	6436902	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	762527	6436902	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	762527	6436902	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	762533	6436902	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	762535	6436902	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	762539	6436900	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	762539	6436900	1	Mt Hope

Microcorys sp. Forrestania (V. English 2004)	P4	50H	762540	6436900	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	762563	6436900	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	762572	6436900	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	762643	6436901	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	762665	6436905	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	762666	6436906	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	762666	6436906	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	762666	6436906	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	759870	6438809	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	759870	6438826	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	759871	6438831	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	759871	6438834	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	759868	6438849	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	759869	6438853	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	759869	6438853	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	759869	6438854	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	759869	6438857	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	759870	6438861	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	759872	6438869	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	759999	6438873	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	760006	6438874	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	760050	6438876	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	760062	6438881	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	760068	6438911	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	760068	6438912	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	760069	6438914	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	760070	6438924	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	760070	6438925	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	760070	6438925	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	760070	6438925	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	760070	6438927	1	Mt Hope
Microcorys sp. Forrestania (V. English 2004)	P4	50H	760069	6438933	1	Mt Hope
Teucrium diabolicum	P3	50H	756956	6407173	120	Mt Hope
Teucrium diabolicum	P3	50H	760065	6438970	100	Crossroads

APPENDIX H:
NATUREMAP LIST OF VASCULAR FLORA (DBCA, 2025B)

DICOT
Acacia acanthoclada subsp. acanthoclada
Acacia acuminata
Acacia acutata
Acacia andrewsii
Acacia asepala
Acacia assimilis subsp. assimilis
Acacia assimilis subsp. atroviridis
Acacia beauverdiana
Acacia bidentata
Acacia binata
Acacia binata Variant
Acacia brachyclada
Acacia brachyphylla var. brachyphylla
Acacia camptoclada
Acacia castanostegia
Acacia chrysella
Acacia coolgardiensis
Acacia cracentis
Acacia deficiens
Acacia densiflora
Acacia dermatophylla
Acacia diaphyllodinea
Acacia dissona var. indoloria
Acacia enervia subsp. enervia
Acacia erinacea
Acacia evenulosa
Acacia excentrica
Acacia glaucoptera
Acacia hadrophylla
Acacia hemiteles
Acacia heterochroa subsp. robertii
Acacia heteroneura
Acacia heteroneura var. heteroneura
Acacia heteroneura var. jutsonii
Acacia hybrid merrallii x poliochroa gold
Acacia hystrix subsp. hystrix
Acacia intricata
Acacia jennerae
Acacia kerryana
Acacia lanuginophylla
Acacia lasiocalyx
Acacia leptopetala
Acacia leptospermoides subsp. leptospermoides
Acacia mackeyana
Acacia merinthophora
Acacia merrallii
Acacia merrallii x poliochroa
Acacia moirii subsp. recurvistipula
Acacia multispicata
Acacia mutabilis subsp. angustifolia
Acacia mutabilis subsp. mutabilis
Acacia neurophylla subsp. erugata
Acacia neurophylla subsp. neurophylla
Acacia nigripilosa subsp. nigripilosa
Acacia nivea
Acacia nyssophylla
Acacia pachypoda
Acacia pinguiculosa subsp. teretifolia
Acacia Plurinerves Phyllodes >8-nerved, flat (aff.lineolata - uncinate)
Acacia Plurinerves-Microneurae Phyllodes >8-nerved, terete(Misc.-SW)
Acacia poliochroa
Acacia poliochroa x merrallii
Acacia prainii
Acacia quinquenervia
Acacia rendlei
Acacia repanda
Acacia rigens
Acacia rostellata
Acacia saligna subsp. lindleyi
Acacia sclerophylla var. sclerophylla
Acacia Sect.Plurinerves Phyllodes 8-nerved(spindly resinous)
Acacia sedifolia subsp. pulvinata
Acacia sessilispica
Acacia singula
Acacia sp.
Acacia sp. indet
Acacia sp. Lake King (R. Hnatiuk 760791)
Acacia sp. Mt Holland (B. Ellery BE 1147)
Acacia sp. narrow phyllode (B.R. Maslin 7831)
Acacia sp. P176 (B.R. Maslin 5831)
Acacia sphacelata subsp. sphacelata
Acacia spinosissima
Acacia steedmanii subsp. steedmanii
Acacia sulcata var. platyphylla
Acacia tetraneura
Acacia tetraptera
Acacia trigonophylla
Acacia uncinella
Acacia undosa
Acacia unifissilis
Acacia verriculum
Acacia viscifolia
Acacia yorkrakinensis subsp. acrita
Acrotriche lancifolia
Actinobole uliginosum
Actinotus humilis
Adenanthos argyreus
Adenanthos glabrescens subsp. glabrescens
Adriana sp.

Allocasuarina acutivalvis
Allocasuarina acutivalvis subsp. acutivalvis
Allocasuarina campestris
Allocasuarina corniculata
Allocasuarina helmsii
Allocasuarina humilis
Allocasuarina microstachya
Allocasuarina scleroclada
Allocasuarina sp.
Allocasuarina spinosissima
Allocasuarina thuyoides
Aluta appressa
Alyogyne hakeifolia
Alyogyne pinoniana var. leptochlamys
Alyxia buxifolia
Anagallis arvensis
Andersonia parvifolia
Androcalva aphrix
Angianthus tomentosus
Anthotium humile
Anthotium rubriflorum
Anticoryne melanosperma
Aotus sp. Southern Wheatbelt (C.A. Gardner & W.E. Blackall 1412)
Aotus sp. Tortile (G.J. Keighery 3767)
Aotus tietkensii
Arctotheca calendula
Argyroglottis turbinata
Astartea ambigua
Asteridea athrixioides
Astroloma epacridis
Astroloma serratifolium
Astus subroseus
Atriplex stipitata
Atriplex vesicaria
Baeckea crispiflora
Baeckea elderiana
Baeckea grandibracteata
Baeckea latens
Baeckea muricata
Baeckea sp.
Baeckea sp. Blue Haze Mine (P. Armstrong 06/910)
Baeckea sp. Crossroads (B.L. Rye & M.E. Trudgen 241186)
Baeckea sp. Flying Fox Mine (A. O'Connor & V. Longman FF532)
Baeckea sp. Forrestania (K.R. Newbey 1105)
Baeckea sp. Hatter Hill (K.R. Newbey 3284)
Baeckea sp. indet
Baeckea sp. Koonadgin (B.L. Rye & M.E. Trudgen BLR 241137)
Baeckea sp. Lake Cronin (K.R. Newbey 9191)
Baeckea sp. Mt Gibbs (G.F. Craig 7031)
Baeckea sp. North Ironcap (R.J. Cranfield 10580)
Baeckea sp. Parker Range (M. Hislop & F. Hort MH 2968)
Balaustion pulcherrimum
Banksia audax
Banksia cirsioides
Banksia densa var. Wheatbelt (M. Pieroni s.n. PERTH 04083407)
Banksia dolichostyla
Banksia elderiana
Banksia epimicta
Banksia erythrocephala
Banksia erythrocephala var. erythrocephala
Banksia laevigata subsp. fuscolutea
Banksia lullfitzii
Banksia pallida
Banksia purdieana
Banksia rufa subsp. flavescens
Banksia violacea
Banksia viscida
Banksia xylothemelia
Beaufortia bracteosa
Beaufortia micrantha
Beaufortia micrantha var. puberula
Beaufortia orbifolia
Beaufortia puberula
Beaufortia schaueri
Bentleya diminuta
Bertya dimerostigma
Beyeria brevifolia
Beyeria minor
Beyeria sulcata var. brevipes
Beyeria sulcata var. gracilis
Beyeria sulcata var. sulcata
Billardiera coriacea
Billardiera fusiformis
Blennospora drummondii
Boronia acanthoclada
Boronia baeckeacea subsp. baeckeacea
Boronia coerulescens
Boronia coerulescens subsp. spicata
Boronia crassifolia
Boronia crenulata
Boronia fabianoides
Boronia fabianoides subsp. rosea
Boronia inornata
Beaufortia bracteosa
Beaufortia micrantha
Beaufortia micrantha var. puberula
Beaufortia orbifolia
Beaufortia puberula
Beaufortia schaueri
Bentleya diminuta
Bertya dimerostigma
Beyeria brevifolia
Beyeria minor
Beyeria sulcata var. brevipes
Beyeria sulcata var. gracilis
Beyeria sulcata var. sulcata
Billardiera coriacea
Billardiera fusiformis
Blennospora drummondii
Boronia acanthoclada
Boronia baeckeacea subsp. baeckeacea
Boronia coerulescens
Boronia coerulescens subsp. spicata
Boronia crassifolia
Boronia crenulata
Boronia fabianoides
Boronia fabianoides subsp. rosea
Boronia inornata
Boronia inornata subsp. inornata
Boronia inornata subsp. leptophylla
Boronia revoluta
Boronia ternata
Boronia ternata var. foliosa
Boronia ternata var. promiscua

Boronia ternata var. ternata
Boronia westringioides
Bossiaea atrata
Brachyloma geissoloma
Brachyloma nguba
Brachyloma stenolobum
Brachyscome ciliaris
Brachyscome eyrensis
Brachyscome perpusilla
Brachyscome perpusilla var. tenella
Brachysola coerulea
Brassica x napus
Bupleurum semicompositum
Calamphoreus inflatus
Calandrinia calyptrata
Calandrinia eremaea
Calandrinia eremaea complex
Calandrinia sp.
Calandrinia sp. indet
Callistemon phoeniceus
Calothamnus gracilis
Calothamnus quadrifidus
Boronia fabianoides
Boronia fabianoides subsp. rosea
Boronia inornata
Boronia inornata subsp. inornata
Boronia inornata subsp. leptophylla
Boronia revoluta
Boronia ternata
Boronia ternata var. foliosa
Boronia ternata var. promiscua
Boronia ternata var. ternata
Boronia westringioides
Bossiaea atrata
Brachyloma geissoloma
Brachyloma nguba
Brachyloma stenolobum
Brachyscome ciliaris
Brachyscome eyrensis
Brachyscome perpusilla
Brachyscome perpusilla var. tenella
Brachysola coerulea
Brassica x napus
Bupleurum semicompositum
Calamphoreus inflatus
Calandrinia calyptrata
Calandrinia eremaea
Calandrinia eremaea complex
Calandrinia sp.
Calandrinia sp. indet
Callistemon phoeniceus
Calothamnus gracilis
Calothamnus quadrifidus
Calothamnus quadrifidus subsp. petraeus
Calothamnus quadrifidus subsp. quadrifidus
Calothamnus quadrifidus subsp. seminudus
Calotis hispidula
Calytrix breviseta subsp. stipulosa
Calytrix duplistipulata
Calytrix habrantha
Calytrix leschenaultii
Calytrix merrelliana
Calytrix nematoclada
Calytrix sapphirina
Cassytha aurea
Cassytha aurea var. hirta
Cassytha glabella
Cassytha glabella forma dispar
Cassytha melantha
Cassytha nodiflora
Cassytha pomiformis
Cassytha racemosa
Centaurium erythraea
Centaurium tenuiflorum
Centipeda crateriformis subsp. compacta
Centipeda crateriformis subsp. crateriformis
Centipeda sp.
Ceratogyne obionoides
Chamelaucium ciliatum
Chamelaucium pauciflorum
Chamelaucium pauciflorum subsp. pauciflorum
Chamelaucium sp. Bendering (T.J. Alford 110)
Chamelaucium sp. Victoria (J. Coleby-Williams 99)
Chamelaucium virgatum
Cheiranthera brevifolia
Chenopodium desertorum subsp. microphyllum
Chenopodium sp. indet
Chlaenosciadium gardneri
Choretrum glomeratum var. glomeratum
Chorizema aciculare subsp. aciculare
Chorizema circinale
Chrysocephalum semipapposum subsp. occidentale
Codonocarpus cotinifolius
Coleanthera myrtoides
Comesperma calcicola
Comesperma calymega
Comesperma drummondii
Comesperma polygaloides
Comesperma scoparium
Comesperma sp. indet.
Comesperma volubile
Commersonia craurophylla
Commersonia gilva
Conospermum brownii
Conospermum croniniae
Conospermum sigmoideum
Coopernookia polygalacea
Coopernookia strophiolata
Crassula colligata subsp. lamprosperma
Crassula colorata
Crassula decumbens var. decumbens
Crassula exserta
Crassula extrorsa
Crassula natans
Crassula peduncularis
Crassula tetramera
Cryptandra apetala var. anomala
Cryptandra exserta
Cryptandra intonsa
Cryptandra leucopogon
Cryptandra minutifolia subsp. brevistyla
Cryptandra minutifolia subsp. minutifolia
Cryptandra myriantha
Cryptandra nutans

Cryptandra polyclada subsp. polyclada
Cryptandra recurva
Cryptandra spyridioides
Cryptandra wilsonii
Cullen discolor
Cyanostegia lanceolata
Cyathostemon ambiguus
Cyathostemon heterantherus
Cyathostemon sp.
Cyathostemon sp. Forrestania Crossroads (B.L. Rye 241170 & M.E. Trudgen)
Cyathostemon sp. WA Thompson & J Allen 951
Cyphanthera microphylla
Dampiera angulata
Dampiera angulata subsp. angulata
Dampiera angulata subsp. Peak Charles (K.R. Newbey 5402)
Dampiera cf. obliqua
Dampiera eriocephala
Dampiera haematotricha subsp. haematotricha
Dampiera juncea
Dampiera lavandulacea
Dampiera obliqua
Dampiera oligophylla
Dampiera orchardii
Dampiera sacculata
Dampiera scaevolina
Dampiera sp.
Dampiera sp. Forrestania (F. Lullfitz L 4034)
Dampiera sp. indet
Dampiera wellsiana
Darwinia sp. Karonie (K. Newbey 8503)
Darwinia sp. Lake Cobham (K. Newbey 3262)
Dasymalla terminalis
Daucus glochidiatus
Daviesia aphylla
Daviesia aphylla x argillacea
Daviesia aphylla x nematophylla
Daviesia argillacea
Daviesia articulata
Daviesia audax
Daviesia benthamii subsp. acanthoclona
Daviesia brachyphylla
Daviesia euryloba
Daviesia grahamii
Daviesia implexa
Daviesia lancifolia
Daviesia nematophylla
Daviesia newbeyi
Daviesia pachyloma
Daviesia pachyphylla
Daviesia rhizomata
Daviesia rhombifolia
Daviesia rubiginosa
Daviesia scoparia
Dicrastylis capitellata
Dicrastylis corymbosa
Dicrastylis obovata
Dicrastylis parvifolia
Dielsiodoxa leucantha subsp. leucantha
Dillwynia acerosa
Dillwynia divaricata
Dillwynia sp.
Dillwynia uncinata
Dillwynia uncinata var. Lake King (P.G. Wilson 6955)
Dodonaea adenophora
Dodonaea amblyophylla
Dodonaea bursariifolia
Dodonaea caespitosa
Dodonaea ceratocarpa
Dodonaea glandulosa
Dodonaea microzyga var. acrolobata
Dodonaea pinifolia
Dodonaea ptarmicaefolia
Dodonaea sp. indet.
Dodonaea stenozyga
Dodonaea viscosa ssp. angustissima x ssp. spathulata intergrade
Dodonaea viscosa subsp. angustissima
Dodonaea viscosa subsp. angustissima / viscosa subsp. spatulata
Drosera browniana
Drosera glanduligera
Drosera lowriei
Drosera macrantha
Drosera macrantha subsp. macrantha
Drosera pycnoblasta
Drosera rupicola
Drosera sp. Branched styles (S.C. Coffey 193)
Drosera sp. indet
Drummondita hassellii
Drummondita sp.
Dryandra erythrocephala
Duboisia hopwoodii
Duma florulenta
Elatine macrocalyx
Epilobium billardiereanum
Eremaea sp. indet
Eremophila biserrata
Eremophila decipiens subsp. decipiens
Eremophila dempsteri
Eremophila densifolia subsp. capitata
Eremophila densifolia subsp. pubiflora
Eremophila deserti
Eremophila drummondii
Eremophila glabra subsp. Forrestania (G.F. Craig 5897)
Eremophila ionantha
Eremophila labrosa
Eremophila maculata subsp. brevifolia
Eremophila oppositifolia subsp. angustifolia
Eremophila psilocalyx
Eremophila racemosa
Eremophila rugosa
Eremophila saligna
Eremophila sp.
Eremophila subfloccosa subsp. lanata
Eremophila verticillata
Erichsenia uncinata
Ericomyrtus drummondii
Ericomyrtus serpyllifolia
Eucalyptus aequioperta
Eucalyptus aff. calycogyna
Eucalyptus alipes
Eucalyptus arachnaea
Eucalyptus aspratilis
Eucalyptus aspratilis / sporadica
Eucalyptus burracoppinensis
Eucalyptus calycogona

Eucalyptus calycogona subsp. calycogona
Eucalyptus capillosa
Eucalyptus celastroides
Eucalyptus celastroides subsp. virella
Eucalyptus cerasiformis
Eucalyptus comitae-vallis
Eucalyptus concinna
Eucalyptus cylindriflora
Eucalyptus cylindrocarpa
Eucalyptus deflexa
Eucalyptus densa subsp. densa
Eucalyptus densa subsp. improcera
Eucalyptus depauperata
Eucalyptus diptera
Eucalyptus distuberosa subsp. distuberosa
Eucalyptus eremophila
Eucalyptus eremophila subsp. eremophila
Eucalyptus eremophila subsp. pterocarpa
Eucalyptus exigua
Eucalyptus extensa
Eucalyptus extensa / protensa
Eucalyptus falcata
Eucalyptus flocktoniae
Eucalyptus flocktoniae subsp. flocktoniae
Eucalyptus flocktoniae subsp. hebes
Eucalyptus foecunda
Eucalyptus georgei subsp. fulgida
Eucalyptus gracilis
Eucalyptus grossa
Eucalyptus horistes
Eucalyptus incerata
Eucalyptus incrassata
Eucalyptus jimberlanica / salubris
Eucalyptus kondininensis
Eucalyptus kondininensis / polita
Eucalyptus leptopoda subsp. leptopoda
Eucalyptus livida
Eucalyptus longicornis
Eucalyptus loxophleba subsp. gratiae
Eucalyptus loxophleba subsp. gratiae x lissophloia
Eucalyptus loxophleba subsp. gratiae x loxophleba subsp. lissophloia
Eucalyptus loxophleba subsp. lissophloia
Eucalyptus luteola
Eucalyptus melanoxylon
Eucalyptus myriadena
Eucalyptus myriadena subsp. myriadena
Eucalyptus myriadena subsp. parviflora
Eucalyptus neutra
Eucalyptus occidentalis
Eucalyptus oleosa
Eucalyptus oleosa subsp. oleosa
Eucalyptus oleosa var. repleta
Eucalyptus olivina
Eucalyptus olivina / aff. perangusta
Eucalyptus perangusta
Eucalyptus phaenophylla
Eucalyptus phaenophylla subsp. interjacens
Eucalyptus phaenophylla subsp. phaenophylla
Eucalyptus phenax
Eucalyptus phenax subsp. phenax
Eucalyptus pileata
Eucalyptus platycorys
Eucalyptus pleurocarpa
Eucalyptus polita
Eucalyptus prolixa
Eucalyptus quadrans
Eucalyptus ravida
Eucalyptus recta
Eucalyptus retusa
Eucalyptus rigidula
Eucalyptus rugulata
Eucalyptus salicola
Eucalyptus salmonophloia
Eucalyptus salubris
Eucalyptus scyphocalyx
Eucalyptus sheathiana
Eucalyptus sp. Fraser Range (D. Nicolle 2157)
Eucalyptus sp. indet.
Eucalyptus sp. Southern Wheatbelt (D. Nicolle & M. French DN 5507)
Eucalyptus sporadica
Eucalyptus steedmanii
Eucalyptus subangusta subsp. subangusta
Eucalyptus suggrandis
Eucalyptus suggrandis subsp. promiscua
Eucalyptus tenera
Eucalyptus tenuis
Eucalyptus tephroclada
Eucalyptus transcontinentalis
Eucalyptus trichopoda
Eucalyptus urna
Eucalyptus vittata
Eucalyptus yilgarnensis
Euchiton sphaericus
Euryomyrtus leptospermoides
Euryomyrtus maidenii
Eutaxia acanthoclada
Eutaxia hirsuta
Eutaxia lasiocalyx
Eutaxia lasiophylla
Eutaxia nanophylla
Eutaxia neurocalyx
Eutaxia neurocalyx subsp. papillosa
Eutaxia parvifolia
Eutaxia rubricarina
Eutaxia sp. North Ironcap (P. Armstrong PA 06/898)
Exocarpos aphyllus
Exocarpos sp. Ardath (J. Buegge D 62)
Exocarpos sparteus
Frankenia drummondii
Frankenia interioris var. parviflora
Frankenia sessilis
Gastrolobium cruciatum
Gastrolobium floribundum
Gastrolobium melanocarpum
Gastrolobium nutans
Gastrolobium parviflorum
Gastrolobium rigidum
Gastrolobium sp.
Gastrolobium spinosum
Gastrolobium tenue
Gastrolobium tetragonophyllum
Glischrocaryon angustifolium
Glischrocaryon flavescens
Glischrocaryon roei

Glischrocaryon sp.
Glossostigma drummondii
Glycocystis beckeri
Glycyrrhiza acanthocarpa
Gnephosis intonsa
Gompholobium gompholobioides
Gompholobium hendersonii
Gompholobium obcordatum
Gompholobium viscidulum
Goodenia affinis
Goodenia dyeri
Goodenia glareicola
Goodenia helmsii
Goodenia incana
Goodenia laevis subsp. humifusa
Goodenia occidentalis
Goodenia pinifolia
Goodenia scapigera subsp. scapigera
Goodenia trichophylla
Goodenia tripartita
Goodenia viscida
Goodenia watsonii
Goodenia watsonii subsp. watsonii
Goodia stenocarpa
Granitites intangendus
Grevillea acuaria
Grevillea anethifolia
Grevillea aneura
Grevillea beardiana
Grevillea biformis subsp. biformis
Grevillea cagiana
Grevillea concinna subsp. lemanniana
Grevillea decipiens
Grevillea didymobotrya subsp. didymobotrya
Grevillea dissecta
Grevillea eremophila
Grevillea eryngioides
Grevillea excelsior
Grevillea hookeriana subsp. apiciloba
Grevillea huegelii
Grevillea incrassata
Grevillea insignis
Grevillea insignis subsp. elliotii
Grevillea insignis subsp. insignis
Grevillea lullfitzii
Grevillea marriottii
Grevillea nematophylla
Grevillea neodissecta
Grevillea oligantha
Grevillea oncogyne
Grevillea pilosa subsp. pilosa
Grevillea pilosa subsp. redacta
Grevillea prostrata
Grevillea pterosperma
Grevillea shuttleworthiana subsp. obovata
Grevillea shuttleworthiana subsp. shuttleworthiana
Grevillea sp. indet
Grevillea sp. indet.
Grevillea teretifolia
Grevillea wittweri
Guichenotia asteriskos
Guichenotia sarotes
Gunniopsis intermedia
Gyrostemon ditrigynus
Gyrostemon racemiger
Haegiela tatei
Hakea commutata
Hakea corymbosa
Hakea cygna subsp. cygna
Hakea erecta
Hakea francisiana
Hakea horrida
Hakea incrassata
Hakea kippistiana
Hakea laurina
Hakea lissocarpha
Hakea meisneriana
Hakea multilineata
Hakea newbeyana
Hakea pandanicarpa subsp. crassifolia
Hakea pendens
Hakea platysperma
Hakea scoparia
Hakea scoparia subsp. scoparia
Hakea subsulcata
Hakea trifurcata
Halgania andromedifolia
Halgania cyanea
Halgania erecta
Halgania integerrima
Halgania lavandulacea
Halgania sp. indet
Haloragis hamata
Haloragodendron glandulosum
Helichrysum leucopsideum
Hemigenia aff. diplanthera
Hemigenia dielsii
Hemigenia diplanthera
Hemigenia humilis
Hemigenia loganiacea
Hemigenia sp.
Hemigenia sp. Newdegate (E. Bishop 75)
Hemigenia teretiuscula
Hemigenia westringioides
Hemiphora elderi
Hemiphora lanata
Hibbertia ancistrophylla
Hibbertia axillibarba
Hibbertia carinata
Hibbertia croninensis ms
Hibbertia eatoniae
Hibbertia exasperata
Hibbertia gracilipes
Hibbertia hemignosta
Hibbertia lepidocalyx subsp. lepidocalyx
Hibbertia oligantha
Hibbertia pachyphylla
Hibbertia psilocarpa
Hibbertia pungens
Hibbertia rostellata
Hibbertia rupicola
Hibbertia sp. Indet
Hibbertia sp. Wheatbelt (J.R. Wheeler 3955)
Hibbertia stowardii

Homalocalyx pulcherrimus
Hyalosperma demissum
Hybanthus epacroides
Hybanthus floribundus
Hybanthus floribundus subsp. floribundus
Hydrocotyle diantha
Hydrocotyle eichleri
Hydrocotyle pilifera var. glabrata
Hydrocotyle rugulosa
Hypochaeris glabra
Hysterobaeckea pterocera
Isoetopsis graminifolia
Isopogon gardneri
Isopogon pruinosus subsp. glabellus
Isopogon scabriusculus
Isopogon scabriusculus subsp. pubifloris
Isopogon scabriusculus subsp. stenophyllus
Isopogon sp. Newdegate (D.B. Foreman 771)
Isopogon villosus
Isotoma scapigera
Jacksonia compressa
Jacksonia condensata
Jacksonia nematoclada
Jacksonia racemosa
Keraudrenia cacaobrunnea subsp. cacaobrunnea
Kippistia suaedifolia
Kunzea jucunda
Kunzea pulchella
Labichea lanceolata
Labichea rossii
Labichea sp. WA Thompson & J Allen 949
Labichea stellata
Lachnostachys bracteosa
Lachnostachys sp.
Lachnostachys verbascifolia var. verbascifolia
Lasiopetalum compactum
Lasiopetalum ferraricollinum
Lasiopetalum rosmarinifolium
Lawrencia glomerata
Lawrencia repens
Lawrencia sp.
Lawrencia sp. small fruits (Symon 2338)
Lechenaultia brevifolia
Lechenaultia formosa
Lechenaultia papillata
Lepidium africanum
Lepidium rotundum
Leptomeria pachyclada
Leptomeria preissiana
Leptosema daviesioides
Leptospermum ? erubescens
Leptospermum erubescens
Leptospermum fastigiatum
Leptospermum incanum
Leptospermum inelegans
Leptospermum nitens
Leptospermum roei
Leptospermum spinescens
Leucopogon cuneifolius
Leucopogon dielsianus
Leucopogon fimbriatus
Leucopogon hamulosus
Leucopogon obtusatus
Leucopogon sp.
Leucopogon sp. Boorabbin (K.R. Newbey 8374)
Leucopogon sp. Coolgardie (M. Hislop & F. Hort MH 3197)
Leucopogon sp. Corrigin (K. Kershaw KK 2091)
Leucopogon sp. Coujinup (M.A. Burgman 1085)
Leucopogon sp. Dragon Rocks (A.M. Coates 2609)
Leucopogon sp. Forrestania (G.F. Craig 2386)
Leucopogon sp. Ironcaps (N. Gibson & K. Brown 3070)
Leucopogon sp. Newdegate (M. Hislop 3585)
Leucopogon sp. outer wheatbelt (M. Hislop 30)
Leucopogon sp. Varley (M. Hislop 3659)
Leucopogon sp. Wheatbelt (S. Murray 257)
Leucopogon sulcatus
Levenhookia pulcherrima
Lobelia rarifolia
Logania buxifolia
Logania exilis
Logania micrantha
Logania nanophylla
Logania perryana
Lysimachia arvensis
Lysinema ciliatum
Lysinema pentapetalum
Maireana marginata
Marianthus microphyllus
Medicago sativa
Melaleuca acuminata subsp. acuminata
Melaleuca adnata
Melaleuca agathosmoides
Melaleuca apodocephala
Melaleuca atroviridis
Melaleuca calyptroides
Melaleuca cardiophylla
Melaleuca carrii
Melaleuca cliffortioides
Melaleuca condylosa
Melaleuca cordata
Melaleuca coronicarpa
Melaleuca cucullata
Melaleuca depauperata
Melaleuca eleuterostachya
Melaleuca elliptica
Melaleuca eurystoma
Melaleuca exuvia
Melaleuca glaberrima
Melaleuca halmaturorum
Melaleuca hamata
Melaleuca hamulosa
Melaleuca johnsonii
Melaleuca lanceolata
Melaleuca lateriflora
Melaleuca lateriflora subsp. lateriflora
Melaleuca laxiflora
Melaleuca lecanantha
Melaleuca macronychia subsp. trygonoides
Melaleuca marginata
Melaleuca pauperiflora subsp. fastigiata
Melaleuca pauperiflora subsp. pauperiflora
Melaleuca pentagona
Melaleuca phoidophylla
Melaleuca platycalyx

Melaleuca podiocarpa
Melaleuca pungens
Melaleuca quadrifaria
Melaleuca rigidifolia
Melaleuca sapientes
Melaleuca scalena
Melaleuca sheathiana
Melaleuca societatis
Melaleuca sp. (NG & KB 2516)
Melaleuca sp. Wongan Hills (R. Davis 1959)
Melaleuca sparsiflora
Melaleuca spicigera
Melaleuca spicigera x subfalcata
Melaleuca strobophylla
Melaleuca teuthidoides
Melaleuca thapsina
Melaleuca thyoides
Melaleuca tuberculata var. tuberculata
Melaleuca villosisepala
Mesembryanthemum nodiflorum
Microcorys ericifolia
Microcorys exserta
Microcorys lenticularis
Microcorys obovata
Microcorys pimeleoides
Microcorys sp.
Microcorys sp. Forrestania (V. English 2004)
Microcorys sp. Mt Holland (D. Angus DA 2397)
Microcybe albiflora
Microcybe ambigua
Microcybe multiflora subsp. multiflora
Microcybe pauciflora
Microcybe pauciflora subsp. grandis
Micromyrtus erichsenii
Micromyrtus obovata
Micromyrtus racemosa
Micromyrtus triptycha subsp. elata
Micromyrtus triptycha subsp. Ironcap (N. Gibson & K. Brown 3082)
Millotia sp. indet
Millotia tenuifolia
Millotia tenuifolia var. tenuifolia
Mirbelia densiflora
Mirbelia dilatata
Mirbelia floribunda
Mirbelia multicaulis
Mirbelia taxifolia
Monotaxis grandiflora var. obtusifolia
Muehlenbeckia adpressa
Muehlenbeckia diclina subsp. diclina
Muehlenbeckia florulenta
Myriocephalus oldfieldii
Myriophyllum verrucosum
Notisia intonsa
Olax benthamiana
Olearia adenolasia
Olearia dampieri subsp. eremicola
Olearia exiguifolia
Olearia homolepis
Olearia incana
Olearia incondita
Olearia laciniifolia
Olearia muelleri
Olearia muricata
Olearia ramosissima
Olearia sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628)
Opercularia hispidula
Opercularia vaginata
Orianthera exilis
Orianthera flaviflora
Orianthera judithiana
Orianthera tortuosa
Oxymyrrhine plicata
Ozothamnus blackallii
Ozothamnus occidentalis
Paragoodia crenulata
Pelargonium drummondii
Pelargonium havlasae
Persoonia angustiflora
Persoonia coriacea
Persoonia coriacea x helix
Persoonia coricea x helix
Persoonia cymbifolia
Persoonia helix
Persoonia inconspicua
Persoonia quinquenervis
Persoonia saundersiana
Persoonia striata
Persoonia teretifolia
Persoonia trinervis
Petrophile circinata
Petrophile fastigiata
Petrophile glauca
Petrophile merrallii
Petrophile seminuda
Petrophile sp. indet
Petrophile stricta
Phebalium ambiguum
Phebalium brachycalyx
Phebalium filifolium
Phebalium intergrade tuberculosum x canaliculatum
Phebalium lepidotum
Phebalium megaphyllum
Phebalium microphyllum
Phebalium sp.
Phebalium sp. Mt Gibbs (G.F. Craig 6658)
Phebalium tuberculosum
Philotheca gardneri subsp. gardneri
Philotheca rhomboidea
Philotheca sp. indet
Phyllangium sp. indet.
Phyllota luehmannii
Phymatocarpus interioris
Pimelea aeruginosa
Pimelea angustifolia
Pimelea cracens
Pimelea erecta
Pimelea graniticola
Pimelea imbricata var. piligera
Pimelea suaveolens subsp. flava
Pittosporum angustifolium
Pityrodia lepidota
Pityrodia scabra subsp. dendrotricha
Plantago debilis
Platysace deflexa

Platysace maxwellii
Platysace trachymenioides
Podolepis capillaris
Podolepis lessonii
Podolepis tepperi
Podotheca gnaphalioides
Poranthera sp.
Prostanthera grylloana
Psammomoya choretroides
Pseudognaphalium luteoalbum
Pterochaeta paniculata
Ptilotus drummondii
Ptilotus holosericeus
Ptilotus humilis
Ptilotus spathulatus
Pultenaea aff. arida
Pultenaea arida
Pultenaea daena
Pultenaea heterochila
Pultenaea indira subsp. indira
Pultenaea indira subsp. monstrosita
Pultenaea purpurea
Pultenaea rotundifolia
Radyera farragei
Regelia inops
Rhagodia drummondii
Rhagodia preissii subsp. preissii
Rhodanthe laevis
Rhodanthe pygmaea
Rhodanthe rubella
Rinzia carnosa
Rinzia communis
Rinzia sessilis
Rinzia torquata
Rinzia triplex
Roepera glauca
Santalum acuminatum
Santalum murrayanum
Scaevola bursariifolia
Scaevola cuneiformis
Scaevola densifolia
Scaevola restiacea
Scaevola restiacea subsp. restiacea
Scaevola sp.
Scaevola spinescens
Scaevola tortuosa
Sclerolaena diacantha
Sclerolaena parviflora
Senecio glabrescens
Senecio glossanthus
Senecio hispidulus
Senecio quadridentatus
Senecio spanomerus
Senna artemisioides
Senna artemisioides subsp. filifolia
Senna artemisioides subsp. x artemisioides
Senna artemisioides subsp. x coriacea
Senna stowardii
Seringia adenogyna
Seringia cacaobrunnea
Seringia velutina
Siloxerus pygmaeus
Solanum capsiciforme
Solanum hoplopetalum
Solanum simile
Sonchus oleraceus
Spyridium cordatum
Spyridium mucronatum subsp. mucronatum
Spyridium polycephalum
Stackhousia monogyna
Stackhousia muricata
Stackhousia pubescens
Stackhousia scoparia
Stellaria filiformis
Stenanthemum bremerense
Stenanthemum liberum
Stenanthemum notiale subsp. notiale
Stenanthemum stipulosum
Stenopetalum lineare var. lineare
Stirlingia simplex
Stylidium breviscapum
Stylidium dichotomum
Stylidium dielsianum
Stylidium involucratum
Stylidium limbatum
Stylidium repens
Stylidium sejunctum
Stylidium sp. indet
Stylidium validum
Stylidium zeicolor
Styphelia exserta
Styphelia intertexta
Styphelia pulchella
Swainsona colutoides
Symonanthus aromaticus
Synaphea divaricata
Synaphea interioris
Synaphea sp.
Synaphea spinulosa
Synaphea spinulosa subsp. major
Synaphea tripartita
Tecticornia syncarpa
Tecticornia undulata
Templetonia aculeata
Templetonia battii
Templetonia rossii
Templetonia sulcata
Templetonia sulcata/smithiana
Tetrapora preissiana
Tetratheca aphylla subsp. megacarpa
Tetratheca efoliata
Teucrium eremaeum
Teucrium myriocladum
Teucrium sessiliflorum
Teucrium sp. dwarf (R. Davis 8813)
Thomasia angustifolia
Thomasia gardneri
Thomasia sarotes
Thryptomene australis
Thryptomene australis subsp. australis
Thryptomene cuspidata
Thryptomene kochii
Thryptomene sp. indet
Trachymene anisocarpa var. anisocarpa

- *Trachymene cyanopetala*
- *Trachymene ornata*
- *Tripterococcus brunonis*
- *Trymalium myrtillus subsp. myrtillus*
- *Urodon dasyphyllus*
- *Ursinia anthemoides*
- *Ursinia anthemoides subsp. anthemoides*
- *Velleia cycnopotamica*
- *Velleia discophora*
- *Verreauxia dyeri*
- *Verticordia acerosa var. preissii*
- *Verticordia chrysantha*
- *Verticordia densiflora var. cespitosa*
- *Verticordia eriocephala*
- *Verticordia gracilis*
- *Verticordia humilis*
- *Verticordia inclusa*
- *Verticordia mitchelliana subsp. implexior*
- *Verticordia multiflora subsp. solox*
- *Verticordia pennigera*
- *Verticordia picta*
- *Verticordia plumosa var. incrassata*
- *Verticordia pritzelii*
- *Verticordia roei subsp. roei*
- *Verticordia sieberi var. curta*
- *Verticordia sieberi var. curta / sieberi var. sieberi*
- *Verticordia sieberi var. pachyphylla*
- *Verticordia sieberi var. sieberi*
- *Verticordia sp. indet*
- *Verticordia stenopetala*
- *Verticordia tumida subsp. therogana*
- *Vittadinia australasica var. australasica*
- *Vittadinia gracilis*
- *Wahlenbergia gracilenta*
- *Wahlenbergia sp.*
- *Waitzia acuminata var. acuminata*
- *Waitzia suaveolens var. flava*
- *Westringia cephalantha*
- *Westringia cephalantha var. caterva*
- *Westringia cephalantha var. cephalantha*
- *Westringia rigida*
- *Westringia sp. indet*
- *Wilsonia humilis*
- *Zygophyllum glaucum*
- *Zygophyllum ovatum*

FERN

- *Cheilanthes lasiophylla*
- *Cheilanthes sieberi subsp. sieberi*
- *Cheilanthes sp.*
- *Isoetes australis*
- *Isoetes brevicula*
- *Isoetes caroli*
- *Isoetes sp.*
- *Marsilea costulifera*
- *Marsilea drummondii*
- *Marsilea mutica*
- *Marsilea sp.*
- *Pleurosorus rutifolius*

GYMNO

- *Callitris canescens*
- *Callitris preissii*
- *Callitris roei*
- *Callitris sp. indet*

MONOCOT

- *Agrostis avenacea*
- *Amphipogon strictus var. breviseta*
- *Austrodanthonia caespitosa*
- *Austrostipa acrociliata*
- *Austrostipa elegantissima*
- *Austrostipa hemipogon*
- *Austrostipa nitida*
- *Austrostipa platychaeta*
- *Austrostipa puberula*
- *Austrostipa scabra*
- *Austrostipa sp. Carlingup Road (S. Kern & R. Jasper LCH 18459)*
- *Austrostipa sp. indet.*
- *Austrostipa sp. Mt Holland (W.A. Thompson & J. Allen 948)*
- *Austrostipa trichophylla*
- *Austrostipa variabilis*
- *Avena sp.*
- *Borya constricta*
- *Borya sphaerocephala*
- *Bromus rubens*
- *Caladenia attingens subsp. gracillima*
- *Caladenia brevisura*
- *Caladenia dimidia*
- *Caladenia doutchiae*
- *Caladenia hirta subsp. rosea*
- *Caladenia microchila*
- *Caladenia pachychila*
- *Caladenia paradoxa*
- *Caladenia roei*
- *Caladenia sigmoidea*
- *Caladenia sp.*
- *Caladenia sp. indet*
- *Caladenia sp. Muddarning Hill (S.D. Hopper 4013)*
- *Caladenia x tryphera*
- *Calectasia gracilis*
- *Calectasia valida*
- *Centrolepis cephaloformis subsp. cephaloformis*
- *Centrolepis humillima*
- *Centrolepis pilosa*
- *Centrolepis polygyna*
- *Centrolepis strigosa*
- *Chamaexeros fimbriata*
- *Conostylis argentea*
- *Conostylis bealiana*
- *Conostylis petrophiloides*
- *Corunastylis fuscoviridis*
- *Cyanicula amplexans*
- *Damasonium minus*
- *Desmocladus myriocladus*
- *Desmocladus parthenicus*
- *Dianella revoluta var. divaricata*
- *Diuris corymbosa*
- *Diuris hazeliae*
- *Diuris laxiflora*
- *Diuris longifolia*
- *Diuris porrifolia*
- *Ehrharta longiflora*
- *Eleocharis acuta*
- *Elymus scaber*
- *Eragrostis dielsii*
- *Ericksonella saccharata*

Eriochilus dilatatus
Eriochilus dilatatus subsp. undulatus
Gahnia sp.
Gahnia sp. dull bases (K.R. Newbey 5111)
Gahnia sp. Ravensthorpe (G.F. Craig 5005)
Isolepis australiensis
Isolepis cernua var. cernua
Isolepis congrua
Juncus aridicola
Juncus bufonius
Juncus flavidus
Juncus subsecundus
Laxmannia paleacea
Lepidobolus chaetocephalus
Lepidobolus spiralis
Lepidosperma aff. amantiferrum
Lepidosperma aff. brunonianum (red scarious margins NG 2512)
Lepidosperma aff. fimbriatum
Lepidosperma amantiferrum
Lepidosperma carphoides
Lepidosperma diurnum
Lepidosperma ferriculmen
Lepidosperma fimbriatum
Lepidosperma lyonsii
Lepidosperma rigidulum
Lepidosperma sanguinolentum
Lepidosperma sp.
Lepidosperma sp. A2 Inland Flat (G.J. Keighery 7000)
Lepidosperma sp. A2 Island Flat (G.J. Keighery 7000)
Lepidosperma sp. Bandalup Scabrid (N. Evelegh 10798)
Lepidosperma sp. indet
Lepidosperma sp. K
Lepidosperma sp. K Boorabbin (K.L. Wilson 2579)
Lepidosperma sp. Lake King (R.L. Barrett 3442)
Lepidosperma sp. Mt Benson (R.L.Barrett 3553)
Lomandra collina
Lomandra micrantha
Lomandra sp. indet
Loxocarya cinerea
Mesomelaena preissii
Mesomelaena stygia subsp. stygia
Microtis media subsp. media
Neurachne alopecuroidea
Ottelia ovalifolia
Paracaleana triens
Pauridia glabella var. glabella
Pauridia sp.
Pentameris airoides subsp. airoides
Pentaschistis airoides
Pentaschistis airoides subsp. airoides
Prasophyllum gracile
Pterostylis aff. barbata
Pterostylis aff. nana
Pterostylis arbuscula
Pterostylis aspera
Pterostylis echinulata
Pterostylis galgula
Pterostylis mutica
Pterostylis picta
Pterostylis recurva
Pterostylis roensis
Pterostylis sanguinea
Pterostylis sargentii
Pterostylis scabra
Pterostylis sp.
Pterostylis sp. fragile (S. Barrett 553)
Pterostylis sp. inland (A.C. Beauglehole 11880)
Pterostylis timothyi
Rostraria cristata
Rostraria pumila
Rytidosperma caespitosum
Schismus barbatus
Schoenus brevisetis
Schoenus calcatus
Schoenus humilis
Schoenus nanus
Schoenus pleiostemoneus
Schoenus racemosus
Schoenus sesquispiculus
Schoenus sp. A1 Boorabbin (K.L. Wilson 2581)
Schoenus subfascicularis
Schoenus subflavus
Schoenus subflavus subsp. hispid culms (K.R. Newbey 8278)
Sowerbaea multicaulis
Spartochloa scirpoidea
Stipa scabra
Stypandra glauca
Tetraria microcarpa
Thelymitra aff. Macrophyllum
Thelymitra antennifera
Thelymitra petrophila
Thysanotus manglesianus
Thysanotus patersonii
Thysanotus sp. indet
Thysanotus triandrus
Triglochin calcitrapa
Triglochin longicarpa
Triglochin mucronata
Triglochin sp.
Triodia rigidissima
Triodia scariosa
Triodia sp. indet.
Vulpia bromoides
Vulpia myuros forma megalura
Vulpia myuros forma myuros
Wurmbea graniticola
Wurmbea sinora
Wurmbea tenella

APPENDIX I: NATUREMAP LIST OF VERTEBRATE FAUNA (DBCA, 2025B)

AMPHIBIAN
Crinia pseudinsignifera
Heleioporus albopunctatus
Limnodynastes dorsalis
Neobatrachus albipes
Neobatrachus kunapalari
Neobatrachus pelobatoides
Neobatrachus sp.
Neobatrachus sutor
Pseudophryne guentheri
Pseudophryne occidentalis
BIRD
Acanthagenys rufogularis
Acanthiza apicalis
Acanthiza chrysorrhoa
Acanthiza chrysorrhoea
Acanthiza chrysorrohea
Acanthiza inornata
Acanthiza uropygialis
Accipiter cirrocephalus
Accipiter fasciatus
Aegotheles cristatus
Anas castanea
Anas gracilis
Anas rhynchotis
Anas superciliosa
Anthochaera carunculata
Anthochaera lunulata
Anthus australis
Anthus cervinus
Apus pacificus
Aquila audax
Ardea pacifica
Ardeotis australis
Artamus cinereus
Artamus cyanopterus
Artamus personatus
Aythya australis
Barnardius zonarius
Biziura lobata
Cacatua roseicapilla
Cacomantis flabelliformis
Cacomantis pallidus
Calamanthus campestris
Calamanthus cautus
Calidris acuminata
Certhionyx variegatus
Charadrius ruficapillus
Chenonetta jubata
Cheramoeca leucosterna
Chrysococcyx basalis
Chrysococcyx osculans
Cincloramphus mathewsi
Cinclosoma castanotus
Cinclosoma clarum
Circus assimilis
Climacteris rufa
Climacteris rufus
Colluricincla harmonica
Coracina novaehollandiae
Corvus bennetti
Corvus coronoides
Corvus orru
Coturnix pectoralis
Cracticus nigrogularis
Cracticus tibicen
Cracticus torquatus
Cuculus pallidus
Cygnus atratus
Daphoenositta chrysoptera
Daphoenositta chysoptera
Dicaeum hirundinaceum
Dromaius novaehollandiae
Drymodes brunneopygia
Egretta novaehollandiae
Elseyornis melanops
Eolophus roseicapillus
Eopsaltria australis griseogularis
Eopsaltria australis subsp. griseogularis
Eopsaltria griseogularis
Epthianura albifrons
Eurostopodus argus
Falco berigora
Falco cenchroides
Falco longipennis
Falco peregrinus
Falcunculus frontatus
Fulica atra
Fulica atra subsp. australis
Gavicalis virescens
Gerygone fusca
Glossopsitta porphyrocephala
Glyciphila melanops
Grallina cyanoleuca
Haliastur sphenurus
Hieraaetus morphnoides
Hirundo neoxena
Hylacola cauta
Hylacola cauta subsp. whitlocki
Lalage tricolor
Leipoa ocellata
Lichenostomus cratitius
Lichenostomus leucotis
Lichenostomus ornatus
Lichenostomus virescens
Lichmera indistincta
Lophoictinia isura
Malacorhynchus membranaceus
Malurus leucopterus
Malurus pulcherrimus
Malurus splendens

- *Manorina flavigula*
- *Melanodryas cucullata*
- *Melithreptus brevirostris*
- *Melopsittacus undulatus*
- *Merops ornatus*
- *Microcarbo melanoleucos*
- *Microeca fascinans*
- *Myiagra inquieta*
- *Neophema elegans*
- *Ninox boobook*
- *Ninox novaeseelandiae*
- *Nycticorax caledonicus*
- *Nymphicus hollandicus*
- *Ocyphaps lophotes*
- *Oreoica gutteralis*
- *Oreoica gutturalis*
- *Oreoica gutturalis subsp. gutturalis*
- *Pachycephala gilberti*
- *Pachycephala inornata*
- *Pachycephala occidentalis*
- *Pachycephala pectoralis*
- *Pachycephala rufiventris*
- *Pardalotus punctatus*
- *Pardalotus punctatus subsp. punctatus*
- *Pardalotus striatus*
- *Parvipsitta porphyrocephala*
- *Petrochelidon ariel*
- *Petrochelidon nigricans*
- *Petroica goodenovii*
- *Phaps chalcoptera*
- *Phaps elegans*
- *Phylidonyris albifrons*
- *Phylidonyris niger*
- *Phylidonyris novaehollandiae*
- *Platycercus icterotis*
- *Platycercus icterotis subsp. xanthogenys*
- *Platycercus icterotis xanthogenys*
- *Platycercus varius*
- *Platycercus zonarius*
- *Podargus strigoides*
- *Podiceps cristatus*
- *Poliocephalus poliocephalus*
- *Polytelis anthopeplus*
- *Pomatostomus superciliosus*
- *Pomatostomus superciliosus subsp. ashbyi*
- *Ptilotula ornata*
- *Ptilotula ornatus*
- *Purnella albifrons*
- *Pyrrholaemus brunneus*
- *Rhipidura albicauda*
- *Rhipidura albiscapa*
- *Rhipidura fuliginosa subsp. preissi*
- *Rhipidura leucophrys*
- *Sericornis frontalis*
- *Sericornis frontatus*
- *Smicrornis brevirostris*
- *Stictonetta naevosa*
- *Stipiturus malachurus*
- *Strepera versicolor*
- *Sugomel niger*
- *Tachybaptus novaehollandiae*
- *Tadorna tadornoides*
- *Taeniopygia guttata*
- *Threskiornis molucca*
- *Threskiornis spinicollis*
- *Todiramphus pyrrhopygius*
- *Todiramphus sanctus*
- *Tribonyx ventralis*
- *Turnix varius*
- *Turnix velox*
- *Zanda latirostris*
- *Zosterops lateralis*
- *Zosterops lateralis subsp. gouldi*
- **MAMMAL**
- *Austronomus australis*
- *Canis dingo*
- *Canis lupus*
- *Cercartetus concinnus*
- *Chalinolobus gouldii*
- *Chalinolobus morio*
- *Dasyurus geoffroii*
- *Felis catus*
- *Isoodon obesulus subsp. fusciventer*
- *Macropus fuliginosus*
- *Macropus irma*
- *Mormopterus planiceps*
- *Mus musculus*
- *Ningaui yvonneae*
- *Notamacropus irma*
- *Notomys mitchelli*
- *Notomys mitchellii*
- *Nyctophilus geoffroyi*
- *Oryctolagus cuniculus*
- *Ozimops kitcheneri*
- *Pseudomys albocinereus*
- *Pseudomys occidentalis*
- *Scotorepens balstoni*
- *Sminthopsis crassicaudata*
- *Sminthopsis dolichura*
- *Sminthopsis gilberti*
- *Sminthopsis granulipes*
- *Sminthopsis griseoventer subsp. griseoventer*
- *Sminthopsis ooldea*
- *Tachyglossus aculeatus*
- *Tarsipes rostratus*
- *Vespadelus baverstocki*
- *Vespadelus regulus*
- *Vulpes vulpes*
- **REPTILE**
- *Anilios australis*
- *Anilios bituberculatus*
- *Crenadactylus ocellatus*
- *Crenadactylus ocellatus subsp. ocellatus*
- *Cryptoblepharus buchananii*
- *Ctenophorus chapmani*
- *Ctenophorus cristatus*
- *Ctenophorus maculatus*
- *Ctenophorus maculatus subsp. griseus*
- *Ctenophorus ornatus*
- *Ctenophorus salinarum*
- *Ctenotus atlas*
- *Ctenotus impar*

Ctenotus mimetes
Ctenotus schomburgkii
Ctenotus uber
Cyclodomorphus melanops subsp. elongatus
Delma australis
Delma fraseri
Diplodactylus calcicolus
Diplodactylus granariensis
Diplodactylus granariensis subsp. granariensis
Diplodactylus pulcher
Echiopsis curta
Egernia formosa
Egernia richardi
Gehyra variegata
Gehyra varigata
Hemiergis initialis
Hemiergis initialis subsp. initialis
Hemiergis peronii subsp. peronii
Hesperoedura reticulata
Lerista distinguenda
Lerista kingii
Lerista picturata
Lialis burtonis
Liopholis inornata
Liopholis multiscutata
Lucasium maini
Lucasium mainii
Menetia greyii
Moloch horridus
Morelia spilota
Morelia spilota subsp. imbricata
Morethia butleri
Morethia obscura
Neelaps bimaculatus
Nephrurus stellatus
Parasuta gouldii
Parasuta nigriceps
Paroplocephalus atriceps
Pogona minor
Pogona minor subsp. minor
Pseudechis australis
Pseudonaja affinis
Pseudonaja affinis subsp. affinis
Pseudonaja mengdeni
Pseudonaja nuchalis
Pygopus lepidopodus
Ramphotyphlops australis
Ramphotyphlops bituberculatus
Ramphotyphlops sp.
Simoselaps bertholdi
Strophurus spinigerus
Strophurus spinigerus subsp. inornatus
Tiliqua occipitalis
Tiliqua rugosa
Tiliqua rugosa subsp. rugosa
Underwoodisaurus milii
Varanus gouldii
Varanus rosenbergi

APPENDIX J: POTENTIALLY OCCURRING INTRODUCED (WEED) FLORA SPECIES

: Family	Taxon	Common Name	WAOL Status	WoNS
Juncaceae	*Juncus bufonius*	Toadrush, Toad Rush	Permitted - s11	
Poaceae	*Aira caryophyllea*	Silvery Hairgrass	Permitted - s11	
Poaceae	*Aira cupaniana*	Hairgrass, Silvery Hairgrass	Permitted - s11	
Poaceae	*Avena barbata*		Permitted - s11	
Poaceae	*Briza minor*	Shivery Grass	Permitted - s11	
Poaceae	*Bromus catharticus*	Prairie Grass	Permitted - s11	
Poaceae	*Bromus hordeaceus*	Soft Brome	Permitted - s11	
Poaceae	*Bromus madritensis*	Madrid Brome	Permitted - s11	
Poaceae	*Bromus rubens*	Red Brome	Permitted - s11	
Poaceae	*Ehrharta longiflora*	Annual Veldtgrass, Annual Veldt Grass	Permitted - s11	
Poaceae	*Hordeum leporinum*	Barley Grass	Permitted - s11	
Poaceae	*Lagurus ovatus*	Hare's Tail Grass	Permitted - s11	
Poaceae	*Lolium perenne*	Perennial ryegrass	Permitted - s11	
Poaceae	*Lolium rigidum*	Annual Ryegrass, Wimmera Ryegrass	Permitted - s11	
Poaceae	*Parapholis incurva*	Coast Barbgrass	Permitted - s11	
Poaceae	*Pentameris airoides*	False Hairgrass	Permitted - s11	
Poaceae	*Pentameris airoides subsp. airoides*		Permitted - s11	
Poaceae	*Rostraria cristata*	Annual Cat's Tail	Permitted - s11	
Poaceae	*Rostraria pumila*	Roughtail	Permitted - s11	
Poaceae	*Schismus barbatus*	Arabian Grass	Permitted - s11	
Poaceae	*Vulpia bromoides*	Squirrel Tail Fescue	Permitted - s11	
Poaceae	*Vulpia myuros*	Rat's Tail Fescue	Permitted - s11	
Aizoaceae	*Mesembryanthemum crystallinum*	Ice Plant, Common Iceplant	Permitted -s11	
Aizoaceae	*Mesembryanthemum nodiflorum*	Slenderleaf Iceplant	Permitted -s11	
Apiaceae	*Bupleurum semicompositum*	hare's ear.	Permitted - s11	
Asteraceae	*Arctotheca calendula*	Capeweed	Permitted - s11	
Asteraceae	*Centaurea melitensis*	Maltese Cockspur	Permitted - s11	
Asteraceae	*Chondrilla juncea*	Skeleton Weed	Declared Pest - s22	
Asteraceae	*Cotula bipinnata*	Fern Cotula, Ferny Cotula	Permitted - s11	
Asteraceae	*Cotula coronopifolia*	Waterbuttons	Permitted - s11	
Asteraceae	*Hypochaeris glabra*	Smooth Cats-ear	Permitted - s11	
Asteraceae	*Monoculus monstrosus*	Stinking Roger	Permitted - s11	
Asteraceae	*Sonchus oleraceus*	Common Sowthistle	Permitted - s11	
Asteraceae	*Ursinia anthemoides*	Ursinia	Permitted - s11	
Boraginaceae	*Heliotropium europaeum*	Common Heliotrope	Permitted - s11	
Brassicaceae	*Alyssum linifolium*	Flax-leaf Alyssum	Permitted - s11	
Brassicaceae	*Brassica tournefortii*	Mediterranean Turnip	Permitted - s11	
Brassicaceae	*Hornungia procumbens*	Oval Purse	Permitted - s11	
Brassicaceae	*Lepidium africanum*	Rubble Peppercress	Permitted - s11	
Caryophyllaceae	*Spergularia diandra*	Lesser Sand Spurry	Permitted - s11	
Caryophyllaceae	*Spergularia rubra*	Red Sand Spurrey, Sand Spurry	Permitted - s11	
Fabaceae	*Medicago sativa*	Lucerne, Alfafa	Permitted - s12	
Fabaceae	*Trifolium campestre*	Hop Clover	Permitted - s11	
Fabaceae	*Trifolium subterraneum*	Sub Clover, Subterranean Clover	Permitted - s11	
Fabaceae	*Trifolium tomentosum*	Woolly Clover	Permitted - s11	
Gentianaceae	*Centaurium erythraea*	Centaury, Common Centaury	Permitted - s11	
Gentianaceae	*Centaurium tenuiflorum*	Slender Centaury	Permitted - s11	
Geraniaceae	*Erodium cicutarium*	Common Storksbill	Permitted - s11	
Orobanchaceae	*Parentucellia latifolia*	Common Bartsia	Permitted - s11	

: Family	Taxon	Common Name	WAOL Status	WoNS
Plantaginaceae	*Plantago coronopus*	Buckshorn Plaintain	Permitted - s11	
Primulaceae	*Lysimachia arvensis*	Pimpernel	Permitted - s11	
Solanaceae	*Lycium ferocissimum*	African Boxthorn	Permitted -s11	Yes

APPENDIX K: EPBC PMST SEARCH RESULTS

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 28-Feb-2025

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	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	1
Listed Threatened Species:	27
Listed Migratory Species:	6

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:	11
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:	9
Regional Forest Agreements:	None
Nationally Important Wetlands:	1
EPBC Act Referrals:	9
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities [Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.
Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text
Eucalypt Woodlands of the Western Australian Wheatbelt	Critically Endangered	Community likely to occur within 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
BIRD		
Aphelocephala leucopsis Southern Whiteface [529]	Vulnerable	Species or species habitat likely to occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat may occur within area
Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat known to occur within area
Pezoporus occidentalis Night Parrot [59350]	Endangered	Species or species habitat may occur within area

Scientific Name	Threatened Category	Presence Text
[Zanda latirostris listed as Calyptorhynchus latirostris]		
Carnaby's Black Cockatoo, Short-billed Black-cockatoo [87737]	Endangered	Species or species habitat known to occur within area
MAMMAL		
[Dasyurus geoffroii]		
Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat known to occur within area
[Myrmecobius fasciatus]		
Numbat [294]	Endangered	Species or species habitat may occur within area
[Parantechinus apicalis]		
Dibbler [313]	Endangered	Species or species habitat may occur within area
[Phascogale calura]		
Red-tailed Phascogale, Red-tailed Wambenger, Kenngoor [316]	Vulnerable	Species or species habitat likely to occur within area
[Pseudomys shortridgei]		
Heath Mouse, Dayang, Heath Rat [77]	Endangered	Species or species habitat may occur within area
PLANT		
[Acacia lanuginophylla]		
Woolly Wattle [55575]	Endangered	Species or species habitat likely to occur within area
[Banksia dolichostyla listed as Banksia sphaerocarpa var. dolichostyla]		
Ironcaps Banksia, Ironcap Banksia [93505]	Vulnerable	Species or species habitat known to occur within area
[Boronia revoluta]		
Ironcap Boronia [9167]	Endangered	Species or species habitat known to occur within area
[Caladenia graniticola]		
Pingaring Spider-orchid, Granite Spider-orchid [84996]	Endangered	Species or species habitat likely to occur within area
[Caladenia hoffmanii]		
Hoffman's Spider-orchid [56719]	Endangered	Species or species habitat may occur within area

Scientific Name	Threatened Category	Presence Text
Calectasia pignattiana Stilted Tinsel Lily [82018]	Vulnerable	Species or species habitat likely to occur within area
Eremophila subteretifolia Lake King Eremophila [56702]	Endangered	Species or species habitat likely to occur within area
Eremophila verticillata Whorled Eremophila [7032]	Endangered	Species or species habitat likely to occur within area
Eucalyptus recta Silver Mallet [56430]	Endangered	Species or species habitat known to occur within area
Eucalyptus steedmanii Steedmans Gum [15393]	Vulnerable	Species or species habitat known to occur within area
Paragoodia crenulata [86387]	Critically Endangered	Species or species habitat known to occur within area
Ricinocarpos trichophorus Barrens Wedding Bush [19931]	Endangered	Species or species habitat may occur within area
Roycea pycnophylloides Saltmat [21161]	Endangered	Species or species habitat likely to occur within area
Tetratheca aphylla Bungalbin Tetratheca [2915]	Vulnerable	Species or species habitat known to occur within area
Verticordia staminosa var. cylindracea Granite Featherflower [55823]	Endangered	Species or species habitat likely to occur within area

Listed Migratory Species		[Resource Information]
Scientific Name	Threatened Category	Presence Text
Migratory Marine Birds		

Scientific Name	Threatened Category	Presence Text
Migratory Terrestrial Species		
[Apus pacificus](#) Fork-tailed Swift [678]		Species or species habitat likely to occur within area
[Motacilla cinerea](#) Grey Wagtail [642]		Species or species habitat may occur within area
Migratory Wetlands Species		
[Actitis hypoleucos](#) Common Sandpiper [59309]		Species or species habitat may occur within area
[Calidris acuminata](#) Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area
[Calidris ferruginea](#) Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
[Calidris melanotos](#) Pectoral Sandpiper [858]		Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species		[Resource Information]
Scientific Name	Threatened Category	Presence Text
Bird		
[Actitis hypoleucos](#) Common Sandpiper [59309]		Species or species habitat may occur within area
[Apus pacificus](#) Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area

Scientific Name	Threatened Category	Presence Text
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area
Chalcites osculans as Chrysococcyx osculans Black-eared Cuckoo [83425]		Species or species habitat known to occur within area overfly marine area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat may occur within area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area
Thinornis cucullatus as Thinornis rubricollis Hooded Plover, Hooded Dotterel [87735]		Species or species habitat may occur within area overfly marine area

Extra Information

State and Territory Reserves		[Resource Information]
Protected Area Name	Reserve Type	State
Frank Hann	National Park	WA
Jackson	Nature Reserve	WA
Jilbadji	Nature Reserve	WA
Lake Cronin	Nature Reserve	WA
Ngadju	Indigenous Protected Area	WA
Tapper Road	Nature Reserve	WA
Unnamed WA09927	Nature Reserve	WA
Unnamed WA29451	Nature Reserve	WA
Unnamed WA34213	Conservation Park	WA

Nationally Important Wetlands	[Resource Information]
Wetland Name	State
Lake Cronin	WA

EPBC Act Referrals			[Resource Information]
Title of referral	Reference	Referral Outcome	Assessment Status
Earl Grey Lithium Project Life of Mine Proposal	2023/09711		Assessment
New Morning Underground Nickel Deposit Project	2021/8971		Completed
Controlled action			
Develop a Nickel Sulphide Open Cut Mine, Underground Mine, and Associated Infra	2008/4443	Controlled Action	Post-Approval
Earl Grey Lithium Project	2017/7950	Controlled Action	Post-Approval
Forrestania Nickel Project - Spotted Quoll-Cosmic Boy Haul Road	2011/6003	Controlled Action	Post-Approval
Not controlled action			
Forrestania Nickel Project Flying Fox T5 and water pipeline	2006/2904	Not Controlled Action	Completed

Title of referral	Reference	Referral Outcome	Assessment Status
Not controlled action			
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed
INDIGO Central Submarine Telecommunications Cable	2017/8127	Not Controlled Action	Completed
Not controlled action (particular manner)			
INDIGO Marine Cable Route Survey (INDIGO)	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval

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 is 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 on the contents of this report.

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 point locations and environmental data layers.

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 when time permits.

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 breeding sites; and
- 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.

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