Department of Mines, Petroleum and Exploration

GOVERNMENT OF WESTERN AUSTRALIA

Clearing Permit Decision Report

1. Application details and outcomes

1.1. Permit application details

Permit number:	11347/1
Permit type:	Purpose permit
Applicant name:	AC Minerals Pty Ltd
Application received:	18 November 2025
Application area:	1,156 hectares
Purpose of clearing:	Mineral production and associated activities
Method of clearing:	Mechanical removal
Tenure:	Mining Lease 28/400
Location (LGA area):	City of Kalgoorlie
Colloquial name:	Rebecca Gold Project

1.2. Description of clearing activities

AC Minerals proposes to clear up to 1,156 hectares of native vegetation within a boundary of approximately 2,367 hectares, for the purpose of mining related infrastructure. The project is located approximately 135 kilometres north-east of Kalgoorlie, within the City of Kalgoorlie.

The application is to allow for clearing to support construction and operation of a greeenfield gold mining and processing project, as shown in Figure 1.

1.3. Decision on application and key considerations

Decision:	Granted
Decision date:	14 May 2026
Decision area:	1,156 hectares of native vegetation

1.4. Reasons for decision

This clearing permit application was submitted, accepted, assessed, and determined in accordance with sections 51E and 51O of the *Environmental Protection Act 1986* (EP Act). The Department of Mines, Petroleum and Exploration (DMPE) advertised the application for public comment for a period of 21 days, and no submissions were received during this period.

In making this decision, the Delegated Officer had regard for the site characteristics (Appendix A), relevant datasets (Appendix E), supporting information provided by the applicant including the results of biolocial survey (Appendix D), the clearing principles set out in Schedule 5 of the EP Act (Appendix B), proposed avoidance and minimisation measures (Section 3.1), relevant planning instruments and any other matters considered relevant to the assessment (Section 3.3).

The assessment identified that the proposed clearing may result in:

- impacts to conservation significant flora;
- the loss of native vegetation that is suitable habitat for fauna including *Leipoa ocellata* (malleefowl), *Aphelocephala leucopsis* (southern whiteface), *Sminthopsis longicaudata* (long-tailed dunnart) and *Jalmenus aridus* (inland hairstreak);
- the potential introduction and spread of weeds into adjacent vegetation, which could impact the quality of the adjacent vegetation and its habitat values; and
- potential land degradation in the form of water erosion.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (Section 3.1), the Delegated Officer determined that the proposed impacts can be minimised and managed to be unlikely to lead to an unacceptable risk to environmental values subject to implementation of the following conditions:

- no clearing of priority flora species within the restricted clearing zones;
- take hygiene steps to minimise the risk of the introduction and spread of weeds;
- no clearing within the exclusion areas;
- no clearing should occur within 50 metres of any identified *Leipoa ocellata* (malleefowl) mound during the non-breeding season;
- where an active (in-use) malleefowl mounds are identified, no clearing within 200 metres of the mound between September and January;
- for inactive *Leipoa ocellata* (malleefowl) mounds during this same period, clearing should not occur within 50 metres of the identified mound between the months of September to January;
- areas proposed to be cleared between 1 July and 31 October are inspected to identify active (in use) southern whiteface nests, and a 50 metre buffer to be maintained around identified active nests;
- areas to be cleared are to be surveyed to identify potential critical habitat and inland hairstreak individuals, and no clearing within 50 metres of inland hairstreak butterfly host plants;
- undertake slow, progressive, one-directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity;
- a fauna spotter shall be present during clearing; and
- watercourse management to avoid riparian vegetation.

1.5. Site map

A site map of proposed development is provided in Figure 1 below.

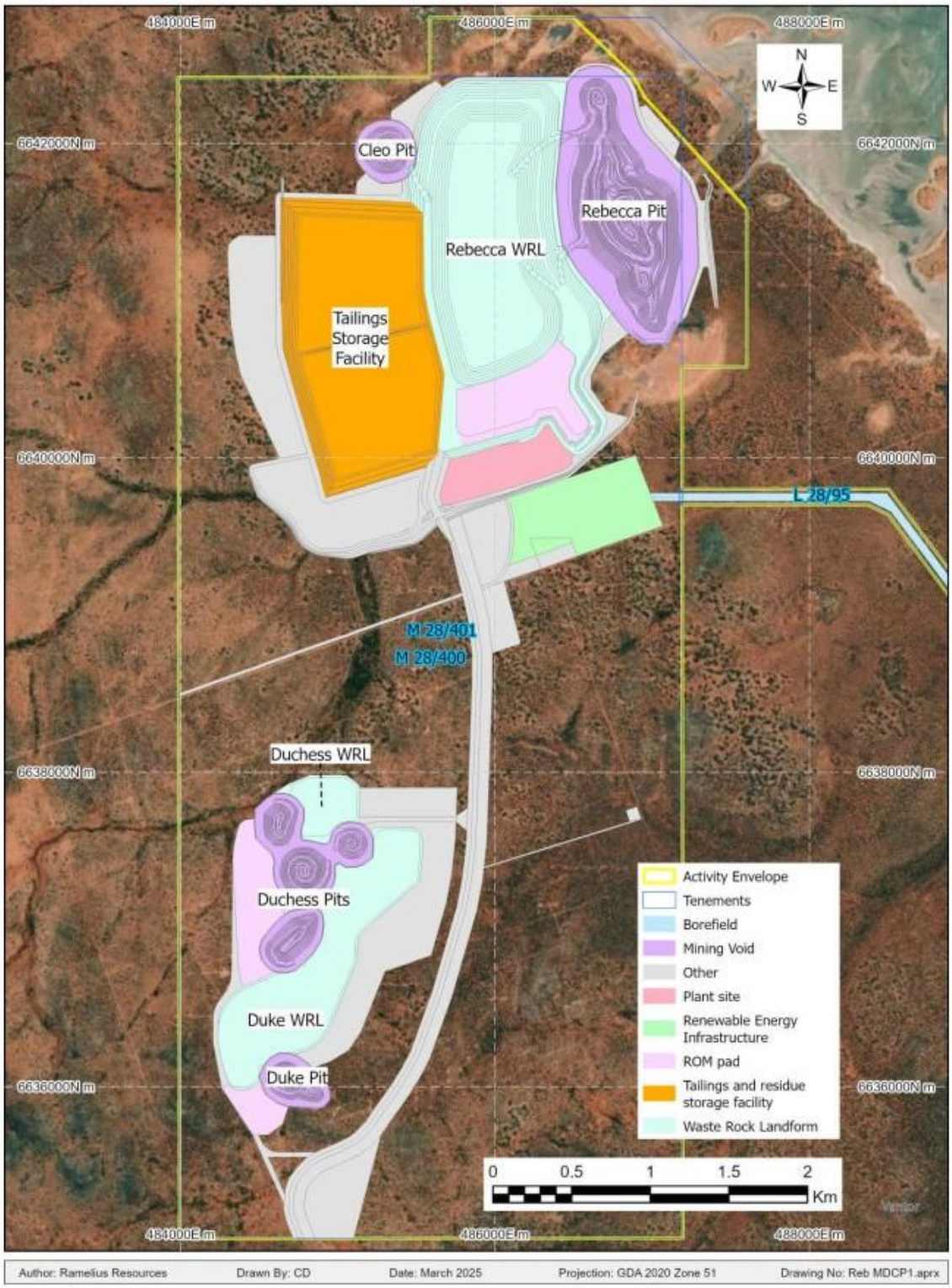


Figure 1. The Rebecca Gold Project layout.

2. Legislative context

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

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

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

Other legislation of relevance for this assessment include:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Biosecurity and Agriculture Management Act 2007* (BAM Act)
- *Conservation and Land Management Act 1984* (WA) (CALM Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
- *Mining Act 1978* (WA)
- *Rights in Water and Irrigation Act 1914* (RIWI Act)

The key guidance documents which inform this assessment are:

- *A guide to the assessment of applications to clear native vegetation* (DER, December 2014)
- *Procedure: Native vegetation clearing permits* (DWER, October 2021)
- Technical guidance – *Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA, 2016a)
- Technical guidance – *Terrestrial Fauna Surveys for Environmental Impact Assessment* (EPA, 2020)
- Guideline for Cumulative Impact Assessment (EPA, 2026)

3. Detailed assessment of application

3.1. Avoidance and mitigation measures

The Native Vegetation Clearing Permit application and the supporting information (Ramelius Resources, 2025a; 2025b) includes the following measures that will assist in mitigating impacts from clearing:

- relocation of drainage line to avoid P2 flora species
- implementation of weed management procedure
- implementation of a vegetation clearing procedure
- waste rock landforms and mine ore pads relocated to avoid stony rise habitat
- diversion drains and bunds installed to re-direct surface flow around mine features and return to natural drainage path downstream of mine features.

3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (Appendix A) and biological survey information (Appendix D) and the extent to which the impacts of the proposed clearing present a risk to biological values.

The assessment against the clearing principles (Appendix B) identified that the impacts of the proposed clearing present a risk to biological values (flora and fauna). The consideration of these impacts, and the extent to which they can be managed through conditions applied in line with sections 51H and 51I of the EP Act, is set out below.

3.2.1. Biological values (flora) - Clearing principles (a) and (f)

Assessment

As per Appendices A.1 (Site Characteristics), A.3 (Flora analysis) and Appendix D (biological survey information), a number of conservation significant flora occur or have the potential to occur within the application area (Botanica Consulting 2023; Maia, 2022; GIS Database) with key taxa discussed below.

***Eremophila praecox* (P2)**

Eremophila praecox is a tall broom-like shrub that occurs on red, brown sandy loam undulating plains across the Eastern Goldfields and Eastern Murchison IBRA subregions (Western Australian Herbarium, 1998-). The flowers are purple, tinged white on the outside. Flowering occurs from October to December and is followed by fruits which are dry, woody, cone-shaped to oval-shaped (ALA, n.d.a). A single plant was recorded in the application area by the Maia survey (2022) and confirmed by the Botanica Consulting survey (2023), with a second plant also found outside the application area in the Botanica Consulting survey. Maia (2022) reported that, including the plant located in the application area, they had records of 75 locations for this species, while 52 records of *Eremophila praecox* are held by the Western Australian Herbarium (Western Australian Herbarium, 1998-). Chinnock (2007, cited in Botanica Consulting, 2023) notes that the total number of plants is unknown and that the species typically occurs as scattered individuals rather than large populations. Maia (2022) noted that the individual found in the application area could be considered to have 'high significance' as it represents a potential range extension for this species. In

their supporting information document, Ramelius Resources (2025b) has committed to an exclusion area around the individual within the application area.

***Eremophila arachnoides subsp. tenera* (P3)**

Eremophila arachnoides subsp. *tenera* is a broom-like shrub, to 3 m high, it has branches with tubercules that are often elongated and coalescing. Flowers are white or a blue-purple (Western Australian Herbarium, 1998-). Within Western Australia, it has been recorded in the Eastern Goldfield, and Eastern Murchison IBRA subregions (Western Australian Herbarium, 1998-). Maia (2022) reported that, including the plants located in the application area, they had records of 830 locations of this species, while 18 records are held by the Western Australian Herbarium (Western Australian Herbarium, 1998-). More than 2000 plants were recorded within the survey area (which is noted to be larger than the application area) during the targeted survey by Botanica Consulting (2023), while 526 plants were recorded by Maia in their 2022 survey. In their assessment of significance, Maia (2022) considered that this population is of 'low' local significance, noting the number of plants recorded and the other records for this species. As per the supporting information provided by Ramelius Resources, clearing for the project envelope will impact some of the *Eremophila arachnoides* subsp. *tenera* (Ramelius Resources, 2025b).

***Acacia eremophila* var. Numerous-nerved variant (P3)**

Acacia eremophila var. Numerous-nerved variant is a dense, rounded, spreading shrub growing to between 1 and 2 metres high (Maia, 2022). The Western Australian Herbarium (1998-) holds 20 records from across five IBRA regions (Avon Wheatbelt, Coolgardie, Esperance Plains, Mallee, Murchison). Maia (2022) identified approximately 356 plants within the application area, and a further 116 plants outside the application area. As per the supporting information provided by Ramelius Resources, known *Acacia eremophila* var. Numerous-nerved variant plants are outside the clearing for the project envelope so will not be impacted (Ramelius Resources, 2025b).

***Hibiscus krichauffianus* (P3)**

Hibiscus krichauffianus is a low or ascending shrub which produces a purple-pink inflorescence in March or October. Its preferred habitat is red sandy soils. Within Western Australia, it has been recorded in the Carlisle, Central, Eastern Murchison, Nullarbor Plain, and Western Murchison IBRA subregions (WA Herbarium, 1998-). An individual was recorded outside the application area by Botanica Consulting (2023) in vegetation type 'CLP-OS1' (refer to Appendix D.1 for description). Neither survey identified *Hibiscus krichauffianus* within the application area (Botanica Consulting, 2023; Maia, 2022). Comparison of the project envelope against areas mapped as 'CLP-OS1' as mapped by Botanica Consulting (2023) indicates that the majority of this vegetation type is outside the project envelope. Based on this, and the presence of this species in other bioregions, any potential impact to this species from clearing is not likely to be regionally or locally significant.

Unidentified taxa

Maia (2022) collected 23 taxa that could not be determined to species level (refer to Appendix D.2) because they were either infertile / vegetative or not in sufficient condition. One specimen was considered to be *Acacia eremophila* var. Numerous-nerved variant, while 11 were identified to likely genus or species that were not conservation listed. No genera of threatened taxa were identified, but 11 of the unknown taxa represent possible priority species, however, the closest potential records are greater than 50 kilometres from the application area, even where the associated land system with the species occurs in the application area (such as the *Tecticornia* sp. collected).

***Santalum spicatum* (Controlled species)**

Santalum spicatum (Sandalwood) was recorded within the application area. Taking of sandalwood is legislated under the BC Act, and a clearing permit issued under the EP Act gives authority to clear sandalwood (DBCA, 2025).

Introduced species

Maia (2022) recorded four weed species (*Monoculus monstrosus*, *Salvia verbenaca, Solanum hoplopetalum and Sonchus oleraceus*) during their survey, none of these are a nationally listed weed or a declared pest at a state level. Similarly, the two additional species (*Mesembryanthemum nodifloru* and *Bidens bipinnata* recorded by Botanica Consulting (2023) are also not listed or declared. It is noted that the Botanica Consulting survey extended outside the application area, and the location of *Mesembryanthemum nodifloru* and *Bidens bipinnata* are not known but they can be considered likely to be present in the application and/or have the potential to spread to the application area.

Conclusion

Based on the above assessment, the proposed clearing will result in disturbance to potential habitat for priority flora; increased potential for spread of weed species, and removal of individuals of *Eremophila arachnoides* subsp. t*enera*.

It is considered that the impacts from the proposed clearing on potential habitat of other species and from weed spread can be managed through standard conditions requiring minimisation of native vegetation clearing and implementation of weed management protocols.

For impacts to *Eremophila arachnoides* subsp. *Tenera* and *Acacia eremophila* var. Numerous-nerved variant, it is considered that restricting clearing of these species in portions of the permit area will minimise impacts to this species.

The proponent has set out that no clearing will occur around the *Eremophila praecox* recorded on site, and it is considered appropriate that this area is also covered by the restricted clearing condition.

Conditions

To address the above impacts, the following management measures will be applied as clearing permit conditions:

- avoid, minimise and reduce the impacts and extent of clearing on native vegetation

- no clearing of priority species within the restricted clearing zones
- take hygiene steps to minimise the risk of the introduction and spread of weeds.

3.2.2. Biological values (fauna) - Clearing principle (b)

Assessment

As per Appendices A.1 (Site Characteristics), A.4 (fauna analysis) and Appendix D (biological survey information), a number of conservation significant or unique fauna occur or have the potential to occur within the application area (Bennelongia, 2022; 2025; Western Wildlife 2022; GIS Database) with key species discussed below.

Avian species

Leipoa ocellata (Malleefowl – Vulnerable) is a large ground-dwelling bird that occurs in semi-arid to arid shrublands and low woodlands dominated by mallee and associated habitats, such as *Melaleuca uncinata* (broombush) and *Callitris sp*. (native pine) scrub (DCCEEW, 2024). Its nests are constructed in sandy soils and leaflitter by building a large mound for egg incubation, and the species favours mallee that has been long unburnt and ungrazed (DCCEEW, 2024). A review of available datasets identified numerous records for this species around the application area. Western Wildlife (2022) identified old nesting mounds within the application area, associated with 'mulga drainage' fauna habitat type. In supporting information provided, the proponent has committed to limiting disturbance in the area covered by this habitat type and it is considered that conditioning of this restriction, together with the fauna management conditions below, will minimise the potential for impacts to this.

Aphelocephala leucopsis (southern whiteface – Vulnerable) occurs across most of mainland Australia, within open woodlands and shrublands where there is an understorey of grasses, shrubs, or both (Commonwealth of Australia, 2008). These areas are usually dominated by acacias or eucalypts on ranges, foothills, lowlands, and plains (Commonwealth of Australia, 2008). *Aphelocephala leucopsis* forages in areas with low tree density and an herbaceous understory with litter cover, and roosts and nests in living and dead trees that contain suitable hollows or crevices (Commonwealth of Australia, 2008). This species nests in large, bulky, domed-shaped nests made out of grass, bark, and roots within hollows or crevices in trees, and low bushes (Commonwealth of Australia, 2008).

No sightings or nests of *Aphelocephala leucopsis* were reported by Western Wildlife (2022). A fauna survey conducted by Terrestrial Ecosystems associated with the Rebecca Gold Project in 2025 recorded *Aphelocephala leucopsis* at two locations (approximately 1.8 kilometres and eight kilometres respectively) to the south-west of the application area (Terrestrial Ecosystems, 2025, as cited in Terrestrial Ecosystems, 2025). Given this, and consistent with the recommendation by Terrestrial Ecosystems (2025), it is considered that conditions are required to minimise potential impacts to this species.

Several migratory and aerial bird species were identified in database searches by both Western Wildlife (2022) and Terrestrial Ecosystem (2025) as potentially or possibly occurring in the application area (refer to Appendix A.4). Species include, *inter alia*, *Calidris acuminata* (sharp-tailed sandpiper), *Calidris ferruginea* (curlew sandpiper), *Apus pacificus* (fork-tailed swift), *Actitis hypoleucos* (common sandpiper), *Falco (Hierofalco) peregrinus* (peregrine falcon), and *Pezoporus occidentalis* (night parrot).

None of these species were recorded in either survey (Terrestrial Ecosystems, 2025; Western Wildlife, 2022) and both reports concluded that either no suitable habitat was present for some species (for example, in the case of *Pezoporus occidentalis)* or that the species would only be an occasional visitor (for example, *Falco (Hierofalco) peregrinus*) and therefore these species are unlikely to be impacted by the proposed clearing.

Mammal species

Sminthopsis longicaudata (long-tailed dunnart – P4) is a small carnivorous marsupial found in arid Western Australia, extending in the Northern Territory and South Australia, with habitat including, rocky screes with hummock grass and shrubs, and tall open shrubland, and woodlands (ALA, n.d.b).

It is the only dunnart to have a tail twice the length of the body (Menkhorst & Knight, 2011). Western Wildlife (2022) recorded *Sminthopsis longicaudata* on a camera trap within a section of the application area mapped as 'stoney rise' fauna habitat. In supporting information provided, the proponent has committed to limiting disturbance in the area covered by this habitat type and it is considered that, with implementation of this condition, potential impacts to this species can be minimised.

Nyctophilus major tor (central long-eared bat – P3) inhabits mixed eucalypt woodlands with prominent shrub strata in arid and semi-arid regions (DBCA, 2024; Menkhorst & Knight, 2011). Western Wildlife (2022) recorded calls of a *Nyctophilus sp.,* however calls could not be confirmed to species level. As the presence of *Nyctophilus major tor* is not confirmed and its habitat is widespread in the region (DBCA, 2024; Menkhorst & Knight, 2011), the proposed clearing of suitable habitat is unlikely to result in a significant impact to the species.

In addition to the above species, a further 15 native mammal species were recorded (Western Wildlife, 2022), as listed in Appendix D.4, including a further three species of dunnarts and six species of bat. None of these species are conservation significant and Western Wildlife (2022) noted that most species are likely to be widespread across the semi-arid regions of Western Australia. The conditions set out below will assist with minimising potential impacts to mammal fauna.

Reptiles

As per Appendix A.1 and Appendix D.3, 40 species of reptiles were recorded within the application area by Western Wildlife (2022), none of these are listed as conservation significant. Western Wildlife (2022) did not identify any conservation significant reptile species as potentially occurring in the application area, while Terrestrial Ecosystems (2025) identified the two species (*Aspidites ramsayi* (woma python – P1) and *Liopholis kintorei* (great desert skink - VU)) as potentially occurring. Review of available GIS databases identified that the closest records are 94 kilometres and 180 kilometres from the application area, respectively (GIS Database). Terrestrial Ecosystems (2025) reported that *Liopholis kintorei* was unlikely to be in the project area due to a lack of suitable habitat, and because it is outside its known geographic range, while *Aspidites ramsayi* was

unlikely to be in the project area due to predation by cats and wild dogs. The conditions below will also assist with minimising impacts to reptiles due to clearing activities.

Invertebrate species

Ogyris petrina (arid bronze azure butterfly – EN) has a severely fragmented and restricted geographic distribution across two remaining subpopulations in Western Australia. *Ogyris petrina* is known to have a complex dependency on the co-occurring sugar ant (*Camponotus* sp. nr. *terebrans*) to complete its lifecycle, with *Ogyris petrina* larvae living entirely in the sugar ants' nest during their development (WABSI, 2022). The preferred habitat for *Ogyris petrina* is described as vegetation of mature mixed gimlet (*Eucalyptus salubris*) and salmon gum (*Eucalyptus salmonophloia*) woodlands on red-brown loam soils, with an open understorey (DBCA, 2020). Western Wildlife (2022) completed a targeted survey for *Camponotus* sp. nr. *terebrans* and while there is smooth bark eucalypts present, no ants were detected and therefore it is considered unlikely that the butterfly occurs in the application area.

Jalmenus aridus (inland hairstreak – P2) *Jalmenus aridus* is a butterfly species known from the Goldfields region (DBCA, 2026). Preferred habitat for inland hairstreak consists of open woodland with flowering shrubs such as those from the *Senna*, *Eremophila*, *Scaveola* and *Maireana* genera (Eastwood et al., 2023). *Jalmenus aridus* larvae occur on two known hostplants, *Senna artemisioides* subsp. *filifolia* and *Acacia tetragonophylla* (Eastwood et al., 2023). Both known hostplants and the supporting flowering shrubs were found in the application area (Botanica Consulting, 2023; Maia, 2022) such as in the 'CLP-MW1' vegetation type described by Botanica (2023) and/or the 'MLOWL (2)' vegetation type described by Maia (2022) (refer to Appendix D.1). Review of available datasets indicates that the nearest records of *Jalmenus aridus* are approximately 125 km west of the application area, however, given the host plant(s) occur within the application area and that surrounding area meets the requirements for suitable habitat, a survey is required to determine whether the inland hairstreak is present within the application area (Eastwood et al., 2023).

Bennelongia undertook field studies for short-range endemic (SRE) invertebrates in 2021 (reported in 2022) and 2025 within the application area and surrounding areas. No Confirmed SREs, Likely Potential SREs, Priority, or Threatened species have been identified from the application area or surrounding areas (Bennelongia, 2025).

The 2021 study was conducted within the application area and identified 37 species of invertebrates, with 18 of these deemed, at the time, to be potential SREs (Bennelongia, 2022). Sampling sites for the 2025 study were primarily located outside the application area; however, the findings remain relevant to the assessment. The 2025 study identified a further five species of invertebrates (Bennelongia, 2025). While the total number of species increased (refer to Appendix D.4), the number of potential SREs decreased, with some of the initially identified potential SREs now known to have wider distributions.

A total of 12 species are only known from the study areas (Bennelongia, 2025), with four considered to be 'unlikely potential SREs' and eight considered to be 'data deficient potential SREs' (Bennelongia, 2025). Of the 12 'singleton' species, six were recorded only at locations that will be impacted by the development (Ramelius Resources, 2025b), with three others occurring within the development footprint as well as at a location outside it, and the remainder found at locations outside the footprint. Bennelongia (2025) concluded that none of the 12 species known only from the Project area are expected to have distributions restricted to the development envelope, as they have been recorded in widespread habitats that are abundant outside the Project area, and that potential impacts on SRE species populations are considered to be minor.

Conclusion

Based on the above assessment, it is considered that the potential direct impacts of the proposed clearing to significant fauna and/or on potentially suitable conservation significant fauna habitat can be managed by implementing fauna management conditions for *Sminthopsis longicaudata, Leipoa ocellata*, *Aphelocephala leucopsis*, and *Jalmenus aridus*. To minimise impacts to native fauna generally and support these species-specific conditions, implementation of conditions requiring minimisation of clearing around watercourses, the presence of a fauna spotter during clearing and directional clearing is also considered as being warranted.

The applicant may have notification responsibilities under the EPBC Act for impacts to *Leipoa ocellata*, and *Aphelocephala leucopsis* and their habitats, as set out in the appropriate EPBC Act National Recovery Plans. The applicant has been advised to contact the federal Department of Climate Change, Energy, the Environment and Water (DCCEEW) to discuss EPBC Act referral requirements.

Conditions

- avoid, minimise to reduce the impacts and extent of clearing
- no clearing within the exclusion areas shown in Schedule 1 of CPS 11347/1;
- no clearing in the areas should occur within 50 metres of any identified *Leipoa ocellata* (malleefowl) mound during the non-breeding season;
- where an active (in-use) mound is identified, no clearing should occur within 200 metres of the mound between September and January;
- for inactive *Leipoa ocellata* (malleefowl) mounds during this same period, clearing should not occur within 50 metres of the identified mound between the months of September to January; and
- areas proposed to be cleared between 1 July and 31 October are inspected to identify active (in use) southern whiteface nests, and to maintain a 50 metre buffer around identified active nests;
- areas to be cleared are to be surveyed to identify potential critical habitat and inland hairstreak individuals, and no clearing within 50 metres of inland hairstreak butterfly host plants
- undertake slow, progressive one-directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity;
- a fauna spotter shall be present during clearing

- watercourse management to avoid riparian vegetation

3.3. Relevant planning instruments and other matters

The clearing permit application was advertised on 12 February 2026 by the Department of Mines, Petroleum and Exploration inviting submissions from the public. No submissions were received in relation to this application.

There is one native title claim (WC2020/006, Kakarra Part B) over the area under application (DPLH, 2026). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group The mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

The north-east corner of application area intersects with the boundary of a registered Aboriginal Site (Lake Rebecca) (DPLH, 2026). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

It is noted that the proposed clearing may impact on *Leipoa ocellata*, and *Aphelocephala leucopsis* which are protected matters under the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act). The proponent may be required to refer the project to the (Commonwealth) Department of Climate Change, Energy, the Environment and Water for environmental impact assessment under the EPBC Act. The proponent is advised to contact the Department of Climate Change, Energy, the Environment and Water for further information regarding notification and referral responsibilities under the EPBC Act.

Other relevant authorisations required for the proposed land use include:

- A Mining Development and Closure Proposal approved under the *Mining Act 1978*

It is the proponent's responsibility to liaise with the Department of Water and Environmental Regulation and the Department of Biodiversity, Conservation and Attractions, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

From the supporting information provided, it is understood that that the proponent is in the process of gaining the above approvals (Ramelius Resources, 2025a)

End

Appendix A. Site characteristics

A.1. Site characteristics

Characteristic	Details
Local context	The area proposed to be cleared is part of an expansive tract of native vegetation in the extensive land use zone of Western Australia and is surrounded by the landscape of the Eastern Murchison Bioregion. Aerial imagery (from 2019) indicates that the application area has been subject to disturbance for mineral exploration and that there is a number of unsealed roads transecting the site (GIS Database). Lake Rebecca, an ephemeral salt lake, is immediately to the north and east of the application area. At the closest point, the application area boundary is approximately 400 metres from the lake (Ramelius Resources, 2025b).
Ecological linkage	Based on aerial imagery, the application area does not form part of any formal or informal ecological linkages (GIS Database).
Conservation areas	The nearest conservation area is the Queen Victoria Spring Nature Reserve, located approximately 25 kilometres to the east of the application area. This reserve is vested as a conservation reserve and is also on the Register of the National Estate (GIS Database).
Vegetation description	The application area occurs within the Eastern Murchison (MUR01) subregion of the Murchison bioregion (GIS Database). The vegetation of the application area is mapped as the following Beard vegetation associations (GIS Database): • Barlee 20 (covering approximately 91 per cent or 2,174 hectares of the application area): low woodland, open low woodland or sparse woodland. Mulga, *Acacia aneura* and associated species • Barlee 400 (covering approximately 8 per cent or 193 hectares of the application area): saltbush and/or bluebush with scattered low trees. Mulga, other wattle, casuarina, *Atriplex* spp., *Maireana* spp. with *Acacia aneura*, *A. papyrocarpa*, *Allocasuarina cristata*. A very small portion of the most north-eastern corner intersects land mapped as Barlee 125 (salt lake/lagoon). A detailed flora and vegetation survey was conducted over the application area by Maia Environmental Consultancy (Maia) during winter (June and July) and spring (September and October during 2021). Maia (2021) recorded 10 broad vegetation types based around two broad groups, being mixed shrublands and woodlands over the majority of the area and chenopod dominated shrublands associated with the drainage flats closer to Lake Rebecca. Botanica Consulting also undertook a detailed flora and vegetation survey over the application area and adjacent areas, including an access road, in May 2023. This survey identified 16 associations in total, with 11 of these occurring within the application area. Vegetation associations from both surveys are presented in Appendix D.1 Most of the application area is mapped as having a low potential to be a terrestrial groundwater-dependent ecosystem (GDE) (described as extensive, gently undulating calcareous stony plains supporting bluebush shrublands). However, there is a small section in the north-western corner of the application area that is mapped as having moderate potential to be a GDE (described as calcareous plains with eucalypt woodlands adjacent to salt lake systems) and a small section in the north-eastern corner that is mapped as having high potential (areas closest to Lake Rebecca and described as salt lakes with extensively fringing saline plains, dunes and sandy banks, supporting low halophytic shrublands and scattered tall acacia shrublands) (AQ, 2024). The high, moderate and low potential GDE areas are also mapped as being highly likely, moderately likely and likely to be inflow dependent ecosystems, reliant on water sources in addition to rainfall, such as water stored in the unsaturated zone, surface water or groundwater (AQ, 2024).
Vegetation condition	From their detailed flora and vegetation survey, Maia (2022) reported the vegetation to be in very good condition (approximately 96 per cent or 2,279 hectares of the application area) or degraded condition (as adapted from Keighery (1994) and Trudgen (1991)), which includes cleared areas (approximately 4 per cent or 87 hectares of the application). Botanica Consulting (2023) reported the vegetation condition as ranging from very good to poor condition (as adapted from Keighery (1994) and Trudgen (1991)), with the majority being in either good condition (approximately 63 per cent or 1,666 hectares) or very good condition (approximately 23 per cent or 556 hectares) and the remainder (approximately 5 per cent or 131 hectares) being poor condition or cleared. The full Keighery (1994) / Trudgen (1991) condition rating scales are provided in Appendix C.

Characteristic	Details
Climate and landform	The climate of the application area is semi-arid to arid, with an annual rainfall average of approximately 265 millimetres recorded at Kalgoorlie-Boulder Airport (Station number:12038) (BoM, 2026a). Eastern Murchison Province consists of hardpan wash plains and sandplains (with some stony plains, hills, mesas and salt lakes) on the granitic rocks and greenstone of the Yilgarn Craton (Tille, 2006). Cowan (2001) describes the East Murchison as being characterised by its internal drainage, and extensive areas of elevated red desert sandplains with minimal dune development. Salt lake systems are associated with the occluded Paleodrainage system. It has broad plains of red-brown soils and breakaway complexes as well as red sandplains. The application area is mapped at elevations of 330 to 380 metres Australian height datum, with a general downwards gradient from the south-west to north-east (GIS Database).
Soil description	The application area overlays five soil landform units (DPIRD, 2025; GIS Database) mapped as • Gundockerta (map unit symbol: 265Gu): Extensive, gently undulating calcareous stony plains supporting bluebush shrublands (approximately 1,147 hectares of the application area) • Deadman system (map unit symbol: 265De): Calcareous plains supporting acacia, black oak and mallee shrublands/woodlands adjacent to salt lake systems (approximately 770 hectares of the application area) • Moriarty system (map unit symbol: 265Mo: Low greenstone rises and stony plains supporting chenopod shrublands with patchy eucalypt overstoreys (approximately 3.84 hectares of the application area) • Carnegie system (map unit symbol: 279Ca): Salt lakes with fringing saline alluvial plains, kopi dunes and sandy banks, supporting halophytic shrublands and acacia tall shrublands (approximately 237 hectares of the application area) • Cundeelee land system (map unit symbol: 274Cu) Gently inclined sheetwash plains, interfluves and sand sheets, supporting mosaic eucalypt-mulga-casuarina woodlands, mixed shrublands and spinifex (approximately 208 hectares of the application area). It is noted that these areas are consistent with available datasets but differ from what is presented in Maia (2022) and Botanica Consulting (2023), which include some other minor units within the application area.
Land degradation risk	Interrogation of the data for the individual soil groups forming the mapping units described above (DPIRD, 2025) indicates that there is variability in the risk of land degradation across the application area, with structure degradation susceptibility ranging from low to high and potential for erodibility ranging from moderate to high, particularly when subject to disturbance such as removal of protective stone mantel or vegetation (DPIRD, 2025).
Waterbodies	The desktop assessment and aerial imagery indicated that three minor, non-perennial watercourses transect the application area. Two of the watercourses converge within the application area prior to flowing towards Lake Rebecca (GIS Database). Two minor clay pans are also evident in aerial imagery. Lake Rebecca is not listed as a Directory of Important Wetlands wetland; the closest is Lake Marmion, approximately 135 kilometres north-west of the application area (GIS Database).
Hydrogeography	The nearest Public Drinking Water Source Area is the Broad Arrow Dam catchment area located approximately 146 kilometres south-east of the application area (GIS Database). The application area is within the Goldfields Groundwater Area, as legislated under the RIWI Act 1994. As above, the application area is within the catchment for Lake Rebecca (GIS Database). The mapped salinity of groundwater ranges from 7000 milligrams per litre total dissolved solids to greater than 35,000 milligrams per litre total dissolved solids (GIS Database). Results of sampling during airlift testing reported by AQ2 (2024) in their H2-level hydrological assessment for the Rebecca Project returned total dissolved solids concentrations ranging between 140,000 milligrams per litre and 230,000 milligrams per litre, which is hypersaline (BoM, 2026b). At the northern end of the application area, groundwater elevation is approximately 321 metres Australian height datum (AQ, 2025).
Flora	The 2022 flora and vegetation survey identified a total of 202 taxa, of which 191 (made up of 86 genera from 37 families) were fully identified to species level (Maia, 2022), whereas the Botanica (2023) flora and vegetation study reported 230 taxa (made up of 102 genera from 38 families). It is noted that the area of the 2023 study is much larger and includes areas outside the application area, including an approximately 30 kilometre access road. The Maia report includes an assessment of potential for taxa that could not be identified to species level to be a conservation significant species, with the assessment presented in Appendix D.2.

Characteristic	Details
	Review of available datasets returned two records of conservation significant flora within 20 kilometres of the application area. The closest record to the application area is for *Eremophila praecox* (a priority 2 species) approximately one kilometre to the north of the application area, while the other record is for *Eremophila arachnoides* subsp. *tenera* approximately 19 kilometres to the north-west of the application area (GIS Database). Three priority flora species (*Eremophila praecox* (priority 2), *Acacia eremophila* var. Numerous-nerved variant (priority 3) and *Eremophila arachnoides* subsp. *tenera* (priority 3)) were recorded in the application area by Maia in 2022, with the Botanica Consulting (2023) survey also recording *Eremophila praecox* and *Eremophila arachnoides* subsp. *tenera* (though in a different portion of the application area. The Botanica Consulting (2023) survey also identified *Acacia eremophila* var. Numerous-nerved variant and *Hibiscus krichauffianus* at locations outside the application area. As well as the priority species above, both surveys (Botanica Consulting, 2023; Maia, 2022) recorded the following species of note: • *Santalum spicatum: Santalum spicatum* (Sandalwood) is a controlled species under the BC Act; • *Eucalyptus salubris* and *Eucalyptus salmonophloia*: both species are key habitat for *Camponotus sp.* nr. *terebrans,* whose burrows form critical habitat for *Ogyris petrina* (arid bronze azure butterfly); and • *Senna artemisioides* subsp. *filifolia*: this species is a key larval host plant for *Jalmenus aridus* (inland hairstreak butterfly). Maia (2022) recorded four weed species (*Monoculus monstrosus*, *Salvia verbenaca, Solanum hoplopetalum and Sonchus oleraceus*) during their survey, none of these are a nationally listed weed or a declared pest at a state level.
Ecological communities	No threatened or priority ecological communities were identified within the application area (GIS Database). The closest threated or priority ecological community is the 'Emu Land System, a priority 3 community, approximately 15 kilometres to the south of the application area. Maia (2022) noted that a further three priority 3 communities within 50 kilometres of the application area and that land systems forming these communities are absent from the application area.
Fauna	Western Wildlife (2022) identified 17 conservation significant fauna that may occur in the application area (refer to Appendix A.4 and section 3.2.2). Of these, *Sminthopsis longicaudata* (long-tailed dunnart), a priority 4 species, was trapped during their detailed fauna survey (Western Wildlife, 2022). This survey recorded 40 reptile species, 73 bird species, 17 native mammal species and six introduced mammals (Western Wildlife, 2022) and the list of species is presented in Appendix D.3. A fauna survey conducted by Terrestrial Ecosystems associated with the Rebecca Gold Project in 2025 recorded *Aphelocephala leucopsis* (southern whiteface) at two locations (one approximately 1.8 kilometres and the other approximately eight kilometres) to the south-west of the application area (Terrestrial Ecosystems, 2025, as cited in Terrestrial Ecosystems, 2025). Western Wildlife (2022) also undertook a targeted survey for *Camponotus* sp. nr.*terebrans* to determine likelihood of *Ogyris petrina* (arid bronze azure butterfly) being present, with no *Camponotus* sp. nr. *terebrans* recorded. No survey was undertaken for other invertebrates such as *Jalmenus aridus* (inland hairstreak) or their obligate ant species (*Froggattella kirbii).* This is discussed in section 3.2.2 Bennelongia (2022 and 2025) undertook two surveys across the application area and adjacent areas targeting short-range endemic (SRE) invertebrate species. Across the two surveys (which include adjacent areas), 43 species of SRE were recorded. Of these, 12 species are only known from within the project area. None have been categorised as confirmed or likely potential SREs; however, four species have been categorised as 'Unlikely Potential SREs' and eight as 'Data deficient potential SREs' (Bennelongia, 2025). Survey findings and species list are provided in Appendix D.4 and discussed in section 3.2.2.
Fauna habitat	Fauna habitat is described in several of the reports provided in support of the application, the fauna habitat set out below is taken from the targeted fauna survey undertaken by Western Wildlife in 2021 and 2022 and is based on the vegetation assessment by Maia (2022), observations made by personnel in the field, and interpretation of aerial photography (Western Wildlife, 2022). Western Wildlife (2022) identified seven fauna habitats within the application area, being: • Eucalypt Woodland • sheoak – chenopod shrubland • mulga drainage • creek line • stoney rise

Characteristic	Details
	• sandy lake margins • salt pan Details of the key fauna habitats are presented in Appendix D.5. Bennelongia (2022 and 2025) also mapped habitat specific to short-range endemic species and identified eight habitat types. • bare lake beds • open eucalypt woodlands with acacia shrublands and halophytic understory • drainage areas with mixed shrubland • halophytic shrublands over sandplains next to salt lakes • open eucalypt woodlands over alluvial plains • mixed acacia shrubland and mallee woodlands over calcareous plains • chenopod shrublands over stony plains • bluebush shrublands over colluvium and sheetwash The most abundant of these was the bluebush shrublands over colluvium and sheetwash habitat (Bennelongia, 2025).

A.2. Vegetation extent

	Pre-European area (ha)	Current extent (ha)	Extent remaining (%)	Current extent in all DBCA managed land (ha)	Current extent in all DBCA Managed Land (proportion of pre-European extent) (%)
IBRA Bioregion - Murchison	28,120,586.77	28,044,823.42	99.73	2,185,987.96	7.77
Beard vegetation associations - State					
20	1,295,103.39	1,292,474.58	99.80	250,985.57	19.38
400	190,823.50	189,665.42	99.39	-	-
Beard vegetation associations - Bioregion					
20	1,174,259.17	1,171,630.81	99.78	181,845.19	15.49
400	190,823.50	189,665.42	99.39	-	-

Government of Western Australia (2019)

A.3. Flora analysis table

With consideration for the site characteristics set out above, relevant datasets (Appendix E.1), and biological survey information (Appendix D), the following conservation significant flora were identified as requiring further consideration.

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Known in other IBRA regions or subregions
Eremophila praecox	P2	Y	Y	Y	Recorded within application area	52	yes
Eremophila arachnoides subsp. *tenera*	P3	Y	Y	Y	Recorded within application area	18	Yes
Acacia eremophila var. Numerous-nerved variant	P3	Y	Y	Y	Recorded within application area	19	Yes
Hibiscus krichauffianus	P3				4	1	Yes

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Known in other IBRA regions or subregions
Santalum spicatum	Controlled species	Y	Y	Y	Recorded within application area	299	Yes

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

A.4. Fauna analysis table

With consideration for the site characteristics set out above, relevant datasets (Appendix E.1), and biological survey information (Appendix D), the following fauna are considered to require listing in this report. Asssement of occurrence and use of the application area by Western Wildlife (2022) and Terrestrial Ecosystems (2025) are also provided where applicable.

Species name	Conservation status (EPBC/BC	Distance of closest record to application area (km)	Assessment by Western Wildlife (2022) and Terrestrial Ecosystems (2025)			
			Likelihood of occurrence	Likely Status in Study Area	Potential habitat use	Comments / notes
Calidris ferruginea (curlew sandpiper)	Cr & Mi / Cr & Mi		Possible	Occasional non-breeding visitor	Salt pans (when inundated)	Inland visitor after rainfall
Pezoporus occidentalis (night parrot)	En / Cr		Unlikely	Foraging visitor (unlikely)	Sandy lake margins	Lacks suitable spinifex habitat
Dasyurus geoffroii (chuditch)	Vu / Vu		Unlikely	Dispersing visitor (unlikely)	All habitats	Likely locally extinct
Leipoa ocellata (malleefowl)	Vu / Vu		Likely	Foraging or breeding resident	Mulga woodland	Old mounds recorded
Polytelis alexandrae (princess parrot)	Vu / P4		Possible	Occasional visitor	None specific	Wide-ranging species
Falco hypoleucos (grey falcon)	Vu / Vu		Possible	Non-breeding visitor	Open habitats	No breeding habitat present
Calidris acuminata (sharp-tailed sandpiper)	Mi / Mi		Potential	Non-breeding visitor	Salt pans (when inundated)	Occurs after summer rain
Calidris ruficollis (red-necked stint)	Mi / Mi		Potential	Non-breeding visitor	Salt pans (when inundated)	Occurs after summer rain
Calidris melanotos (pectoral sandpiper)	Mi / Mi		Possible	Non-breeding visitor	Freshwater to brackish wetlands	Prefers freshwater
Actitis hypoleucos (common sandpiper)	Mi/Mi		Potential	Non-breeding visitor	Salt pans (when inundated)	Widespread migrant
Tringa nebularia (common greenshank)	Mi / Mi		Potential	Non-breeding visitor	Salt pans (when inundated)	Single regional record
Gelochelidon nilotica (gull-billed tern)	Mi / Mi		Possible	Seasonal visitor	Inland salt lakes	Occasional inland breeder
Apus pacificus (fork-tailed swift)	Mi / Mi		Potential	Non-breeding visitor	Any habitat (aerial)	Largely aerial

Species name	Conservation status (EPBC/BC	Distance of closest record to application area (km)	Assessment by Western Wildlife (2022) and Terrestrial Ecosystems (2025)			
			Likelihood of occurrence	Likely Status in Study Area	Potential habitat use	Comments / notes
Motacilla cinerea (grey wagtail)	Mi / Mi		Unlikely	Non-breeding visitor	Salt pans, sandy margins	Extremely uncommon in WA
Falco peregrinus (peregrine falcon)	NL / Sp		Potential	Foraging or breeding visitor	Open habitats	Population secure
Nyctophilus major tor (central long-eared bat)	NL / P3		Potential	Resident (if present)	Woodlands	Presence unconfirmed
Sminthopsis longicaudata (long-tailed dunnart)	DBCA: P4		Known	Resident	Stony rises	Confirmed record
Aphelocephala leucopsis (southern whiteface)	Vu / Vu	1.8	Potential	-	-	Recorded in the nearby areas
Charadrius veredus (oriental plover)	Mi / Mi		Unlikely	-	-	Has not been recently recorded in the general area
Dasycercus blythi (brush-tailed mulgara	NL / P4		Unlikely			Outside known geographic range
Ogyris petrina (arid bronze azure butterfly)	CR /CR		Unlikely			No obligate ant found
Aspidites ramsayi (woma)	NL / P1		unlikely	-	-	-
Liopholis kintorei (great desert skink)	Vu / Vu		unlikely	None present		-
Sminthopsis psammophila (sandhill dunnart)	En / En		unlikely			Not known in area
Jalmenus aridus (inland hairstreak)	NL / P1		-	-	-	-

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, MI: migratory, CD: conservation dependent, OS: other specially protected, P: priority NL: Not listed

Appendix B. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
Principle (a): *"Native vegetation should not be cleared if it comprises a high level of biodiversity."* Assessment: The flora composition and vegetation types within the application area are typical of the region and not considered unusually diverse (Botanica Consulting, 2023; Maia 2022). However, priority flora and fauna species have been recorded within the application area (Botanica Consulting, 2023; Maia, 2022; Western Wildlife, 2022).	May be at variance	Yes *Refer to Section 3.2.1, above.*
Principle (b): *"Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna."* Assessment: The area proposed to be cleared contains habitat for conservation significant fauna (*Sminthopsis longicaudata* (P4)) and other vertebrate and invertebrate species (Bennelongia 2022, 2025; Western Wildlife, 2022).	At variance	Yes *Refer to Section 3.2.2 above.*
Principle (c): *"Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."* Assessment: No threatened flora was identified in either of the two flora surveys provided in support of the application (Botanica Consulting 2023; Maia, 2022). The nearest record of threatened flora is approximately 45 kilometres from the application area.	Not likely to be at variance	Yes *Refer to Section 3.2.1, above.*
Principle (d): *"Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community."* Assessment: No threatened or priority ecological communities are present within the application area (GIS Database).	Not likely to be at variance	No
Environmental value: significant remnant vegetation and conservation areas		
Principle (e): *"Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared."* Assessment: The vegetation proposed to be cleared is not considered to be part of a significant ecological linkage in the local area or represent a significant remnant of native vegetation in an area that has been extensively cleared (GIS Database).	Not likely to be at variance	No
Principle (h): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area."* Assessment: The nearest conservation area is 25 kilometres to the east of the application area. The proposed clearing is unlikely to have an impact on any conservation areas, as surface water flows from the application are intercepted by Lake Rebecca (GIS Database).	Not likely to be at variance	No
Environmental value: land and water resources		
Principle (f): *"Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland."* Assessment: There are no permanent waterbodies or watercourses within the application area, however, there are several minor ephemeral drainage lines that flow through the application area and into Lake Rebecca, along with a small clay pan. These are	At variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
common in the surrounding area, and the proposed clearing is not likely to have a significant impact on riparian vegetation in the local area (GIS Database).		
Principle (g): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."* Assessment: There is variability in the risk of land degradation across these soil units. Overall, the three soil groups may be prone to water erosion following removal of vegetation or soil surface disturbance (DPIRD, 2025). Potential erosion impacts because of the proposed clearing can be minimised by the implementation of a stated clearing condition to ensure large areas are not void of vegetation cover for extended periods.	May be at variance	No
Principle (i): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water."* Assessment: There are no permanent waterbodies or watercourses within the application area, however, there are several minor ephemeral drainage lines that transect the application area, flowing to Lake Rebecca and also a small clay plan within the application area. Potential erosion impacts to surface water because of the proposed clearing can be minimised by the implementation of a stated clearing condition to ensure large areas are not void of vegetation cover for extended periods. Impact on groundwater quality due to clearing is considered unlikely given the depth to groundwater.	May be at variance	No
Principle (j): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding."* Assessment: Construction and mining operations will alter surface water flows and catchments that if not managed may lead to localised flooding (AQ2 2021), however clearing activities are unlikely to directly result in exacerbating flooding or water logging outside the application area.	Not likely to be at variance	No.

Appendix C. Vegetation condition rating scale

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

Condition of the vegetation proposed to be cleared is reported in both detailed flora and vegetation assessments (Maia, 2022 and Botanica Consulting, 2023). Both Maia and Botanica Consulting used a rating scale adapted from Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia and Trudgen, M.E. (1991) *Vegetation condition scale* in National Trust (WA) 1993 Urban Bushland Policy. National Trust of Australia (WA), Wildflower Society of WA (Inc.), and the Tree Society (Inc.), Perth. This is consistent with the *Technical Guidance: Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA, 2016)

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

Condition	Description
Pristine	Pristine or nearly so, no obvious signs of disturbance.
Excellent	Vegetation structure intact, with disturbance affecting individual species; weeds are non-aggressive species.
Very good	Vegetation structure altered, with obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and/or grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and/or grazing.

Condition	Description
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and/or grazing.
Completely degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.

Measuring vegetation condition for the Eremaean and Northern Botanical Provinces (Trudgen, 1991)

Condition	Description
Excellent	Pristine or nearly so, no obvious signs of damage caused by human activities since European settlement.
Very good	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	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.
Very poor	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	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 D. Biological survey information excerpts

D.1. Vegetation Types

Summary of vegetation types within the application area as mapped in Botanica Consulting (2023) and Maia (2022) are presented in the extracts below. In relation to the vegetation types described by Botanica Consulting, it should be noted that the following types were not recorded within the application area: CLP-AOW2, DD-AS1 and RP-COW1.

Botanica Consulting (2023) – Vegetation Types

Vegetation Code	NVIS Major Vegetation Group	Vegetation Type	Landform	Image
CLP-AOW2 21.3 ha (0.4 %)	*Acacia* low open woodland	*Acacia ramulosa* var. *ramulosa*, *A. incurvaneura*, *A. caesaneura* low woodland over *Acacia tetragonophylla*, *Eremophila clarkei*, *E. decipiens* mid open shrubland over *Maireana sedifolia*, *Ptilotus obovatus*, *Rhagodia drummondii* low sparse shrubland	Clay-loam plain	
CLP-AWS1 204.0 ha (4.2 %)	*Acacia* woodland	*Acacia caesaneura*, *A. incurvaneura*, *A. mulganeura* woodland over *Acacia burkittii*, *A. tetragonophylla* tall sparse shrubland over *Eremophila clarkei*, *E. latrobei* sparse shrubland over *Ptilotus obovatus*, *Solanum lasiophyllum* low shrubland over *Erodium cygnorum*, *Cheilanthes sieberi* isolated herbs with *Leichhardtia australis* isolated vines	Clay-loam plain	

Vegetation Code	NVIS Major Vegetation Group	Vegetation Type	Landform	Image
CLP-AWS2 857.5 ha (17.5 %)	*Acacia* woodland	*Acacia burkittii*, *Acacia tetragonophylla*, *Eremophila oldfieldii* subsp. *angustifolia* tall isolated shrubs over *Dodonaea lobulata*, *Senna artemisioides* subsp. *filifolia* and *Scaevola spinescens* shrubland over *Ptilotus obovatus*, *Maireana sedifolia* low open shrubland over *Austrostipa trichophylla* isolated tussock grasses and *Leichhardtia australis* isolated vines	Clay-loam plain	
CLP-EOW1 556.7 ha (11.4 %)	*Eucalyptus* open woodland	*Eucalyptus lesouefii*, *E. salubris* low open woodland over *Eremophila scoparia*, *Senna artemisioides* subsp. *filifolia*, *Exocarpos aphyllus* open shrubland over *Maireana sedifolia*, *Eremophila parvifolia* subsp. *auricampa* *Atriplex vesicaria* low open shrubland	Clay-loam plain	

Vegetation Code	NVIS Major Vegetation Group	Vegetation Type	Landform	Image
CLP-EOW2 370.7 ha (7.6 %)	*Eucalyptus* open woodland	*Eucalyptus salmonophloia*, *E. salubris* and *Casuarina pauper* open woodland over *Senna artemisioides* subsp. *filifolia*, *Eremophila glabra* sparse shrubland over *Ptilotus obovatus*, *Maireana sedifolia*, *Olearia muelleri* low sparse shrubland	Clay-loam plain	
CLP-MS1 73.0 ha (1.5 %)	Mixed shrubland	*Cratystylis subspinescens*, *Eremophila scoparia and Senna artemisioides* subsp. *filifolia mixed shrubland over Atriplex vesicaria low sparse chenopod shrubland*	Clay-loam plain	

Vegetation Code	NVIS Major Vegetation Group	Vegetation Type	Landform	Image
CLP-MW1 580.9 ha (11.9 %)	Mixed woodland	*Casuarina pauper*, *E. oleosa* and *E. salubris* low open woodland over *Acacia hemiteles*, *A. colletioides* tall open shrubland over *Senna artemisioides* subsp. *filifolia*, *Scaevola spinescens*, *Dodonaea lobulata* mid sparse shrubland over *Olearia muelleri*, *Maireana sedifolia* and *Atriplex vesicaria* low open shrubland	Clay-loam plain	
CLP-OS1 885.4 ha (18.1 %)	Mixed open shrubland	*Eucalyptus lesouefii*, *Casuarina pauper*, *Eucalyptus yilgarnensis* low isolated trees over *Eremophila scoparia*, *E. decipiens* and *Dodonaea viscosa* mid open shrubland over *Ptilotus obovatus*, *Enchylaena tomentosa* low sparse shrubland	Clay-loam plain	

Vegetation Code	NVIS Major Vegetation Group	Vegetation Type	Landform	Image
CP-CS1 27.6 ha (0.6 %)	Chenopod shrubland	*Tecticornia doliiformis*, *T.* sp. Dennys Crossing (K.A. Shepherd & J. English KS 552) and *Tecticornia peltata* low open samphire shrubland	Claypan	
CP-CS2 15.2 ha (0.3 %)	Chenopod shrubland	*Tecticornia indica* subsp. *bidens*, *Tecticornia pergranulata* subsp. *divaricata* and *Tecticornia* sp. Dennys Crossing low open chenopod shrubland with *Frankenia pauciflora* var. *pauciflora*, *F. setosa* and *Maireana amoena* low open shrubland	Claypan	

Vegetation Code	NVIS Major Vegetation Group	Vegetation Type	Landform	Image
DD-AS1 78.4 ha (1.6 %)	*Acacia* shrubland	*Acacia incurvaneura, A. tetragonophylla, A. burkittii* tall open shrubland over *Eremophila clarkei, E. latrobei* sparse shrubland over *Maireana sedifolia, Ptilotus obovatus, Solanum lasiophyllum* low shrubland over *Erodium cygnorum, Cheilanthes sieberi* low herbland with *Leichhardtia australis* isolated vines	Drainage depression	
DD-EOW1 73.7 ha (1.5 %)	*Eucalyptus* open woodland	*Eucalyptus lesouefii, Casuarina pauper* low open woodland over *Acacia incurvaneura, A. hemiteles* tall open shrubland over *Eremophila decipiens and Senna artemisioides* subsp. *filifolia* mid open shrubland over *Ptilotus obovatus, Enchylaena tomentosa* and *Maireana radiata* low open shrubland *with Leichhardtia australis* isolated vines	Drainage depression	

Vegetation Code	NVIS Major Vegetation Group	Vegetation Type	Landform	Image
RP-COW1 595.8 ha (12.1 %)	*Casuarina* open woodland	*Casuarina pauper* low open woodland over *Acacia burkittii*, *Acacia tetragonophylla*, *Eremophila oldfieldii* subsp. *angustifolia* tall isolated shrubs over *Dodonaea lobulata*, *Senna artemisioides* subsp. *filifolia* and *Scaevola spinescens* shrubland over *Ptilotus obovatus*, *Maireana sedifolia* low open shrubland	Rocky Plain	
SD-AOS1 152.3 ha (3.1 %)	*Acacia* tall open shrubland	*Acacia ramulosa* var. *ramulosa*, *A. aptaneura*, *Eremophila miniata* tall open shrubland over *Enchylaena tomentosa*, *Rhagodia drummondii* and *Pimelea microcephala* subsp. *microcephala* low sparse shrubland	Sand dune	

Maia (2022) – Vegetation Types

ATSSL; Acacia Tall Sparse Shrubland

This vegetation type occurred on hill crests and plains and was mapped over 162.15 ha (6.85%) of the Survey Area. Twenty-six native plant species and no weed species were recorded in the quadrats assessed in this vegetation type. The P3 species *Eremophila arachnoides* subsp. *tenera* recorded in areas mapped as this vegetation type as well as Sandalwood (*Santalum spicatum*). *Prostanthera althoferi subsp. althoferi* is a perfect (100%) indicator species for this vegetation type and *Acacia mulganeura* (variant 2), *Acacia aneura* and *Dodonaea rigida* are moderate significance indicator species.

The average vegetation condition was rated as Very Good with 67% of sites rated as Very Good and 33% rated as Good. The main disturbances noted were grazing, animal tracks - trampled vegetation and exploration activities.

Vegetation description	Associated species/Species richness	Sites
Tall Sparse Shrubland of *Acacia aneura*, *A. caesaneura* (narrow phyllode variant) and / or *A. mulganeura* (variant 2) with a mixed Sparse Shrubland mainly of *Scaevola spinescens*, *Eremophila metallicorum* and *Prostanthera althoferi* subsp. *althoferi*	*Acacia tetragonophylla*, *Austrostipa trichophylla*, *Cheilanthes sieberi* subsp. *sieberi*, *Dodonaea rigida* The average species richness was 13.67 (+/- 0.94)	LRQ020, LRQ031, LRQ052

ELOW: Eucalyptus Low Open Woodland

This vegetation type occurred on undulating plains, low rolling hill slopes and hill crests in the Survey Area and is mapped over 412.18 ha (17.42%). Twenty-one native plant species and no weed species were recorded in the quadrats assessed in this vegetation type. The P3 species *Eremophila arachnoides* subsp. *tenera* was recorded in areas mapped as this vegetation type as well as Sandalwood (*Santalum spicatum*). *Eremophila parvifolia* subsp. *auricampi* and *Exocarpos aphyllus* are low indicator species for this vegetation type.

The average vegetation condition was rated as Very Good with 75% of sites rated as Very Good and 25% as Excellent. The main disturbances noted were grazing and animal tracks - trampled vegetation.

Vegetation description	Associated species/Species richness	Sites
Low Open Woodland of either *Eucalyptus lesouefii* and / or *E. salubris* with an Open Shrubland of *Eremophila scoparia* and/or *Senna artemisioides* subsp. *filifolia* over a Low Open Shrubland of *Maireana sedifolia*, *Eremophila parvifolia* subsp. *auricampa* and *Olearia muelleri*.	*Acacia hemiteles*, *Atriplex vesicaria*, *Exocarpos aphyllus*, *Pittosporum angustifolium* The average species richness was 9.75 (+/- 2.10)	LRQ002, LRQ044, LRQ045, LRQ051

MLCSL: Mixed Low Chenopod Shrubland

This vegetation type occurs on playa lakes / depressions and saline plains and is mapped over 23.59 ha (1.00%)of the Survey Area. LRQ004 was moved from MSL into this vegetation type based on the dominance of *Tecticornia*. LRQ004 may have been sampled in an ecotone between MSL and MLCSL. Thirty-six native plant species and two weed species were recorded in this vegetation type and no conservation significant flora species. *Tecticornia doliiformis* is a moderate indicator species for this vegetation type as well as *T.* sp. Dennys Crossing, *T. pergranulata* subsp. *divaricata* and T. sp. 4 (sterile, Maia Project 2106).

The average vegetation condition was rated as Very Good with 75% of sites rated as Very Good and 25% as Excellent. The main disturbances noted were grazing and animal tracks - trampled vegetation.

Vegetation description	Associated species/Species richness	Sites
Mixed Low Chenopod Shrubland mainly of *Tecticornia doliiformis*, *T. sp. Dennys Crossing (K.A. Shepherd & J. English KS 552)* and *Tecticornia* sp. 4 (sterile, Maia Project 2106).	*Frankenia pauciflora* var. *pauciflora*, *Maireana amoena*, *M. radiata*, *Tecticornia pergranulata* subsp. *divaricata* The average species richness was 11.25 (+/- 5.93)	LRQ004, LRQ009, LRQ015, LRQ061

MLOWL (1): Mixed Low Open Woodland to Open Forest

This vegetation type occurred on a variety of habitats including flat plains, hill slopes, drainage lines and depressions. It is mapped over 137.02 ha (5.79%) of the Survey Area. One quadrat, LRQ055, was sampled just outside of the eastern boundary of the Survey Area. Forty native plant species and no weed species were recorded in the quadrats assessed in this vegetation type. The P3 species *Acacia eremophila* var. Numerous-nerved variant and *Eremophila arachnoides* subsp. *tenera* were recorded in it as well as Sandalwood (*Santalum spicatum*). Acacia hemiteles is a moderate indicator species for this vegetation type and *Scaevola spinescens* and *Eucalyptus salmonophloia* are low indicator species.

The average vegetation condition was rated as Very Good with 90% of sites rated as Very Good and 10% rated as Excellent. The main disturbances noted were grazing, animal tracks - trampled vegetation and exploration activities.

Vegetation description	Associated species/Species richness	Sites
Mixed Low Open Woodland to Forest mainly of *Eucalyptus salubris*, *E. salmonophloia* and *Casuarina pauper* with a Low Open Shrubland of *Maireana sedifolia* and *Olearia muelleri* and a mixed Sparse Shrubland mainly of *Senna artemisioides* subsp. *filifolia*, *Scaevola spinescens and Acacia hemiteles*	*Acacia nyssophylla*, *A. oswaldii*, *Atriplex nummularia* subsp. *spathulata*, *Dodonaea lobulata*, *Enchylaena tomentosa* var. *tomentosa*, *Eremophila parvifolia* subsp. *auricampi*, *E. scoparia*, *Ptilotus obovatus* The average species richness was 12.5 (+/-0 3)	LRQ007, LRQ013, LRQ021, LRQ030, LRQ049, LRQ053, LRQ055, LRQ056, LRQ057, LRQ060

MLOWL (2): Mixed Low Open Woodland

This vegetation type mainly occurred on hill slopes, hill crests and plains and was mapped over 564.80 ha (23.87%) of the Survey Area. Fifty-five native plant species and no weed species were recorded in quadrats assessed in this vegetation type. The P3 species *Acacia eremophila* var. Numerous-nerved variant and *Eremophila arachnoides* subsp. *tenera* were recorded in it as well as Sandalwood (*Santalum spicatum*). *Eremophila oldfieldii* subsp. *angustifolia* and *Alyxia buxifolia* are low indicator species for this vegetation type and *Olearia muelleri* a poor one.

The average vegetation condition was rated as Very Good with 77% of sites rated as Very Good, 15% rated as Excellent and 8% rated as Good. The main disturbances noted were grazing, animal tracks - trampled vegetation and exploration activities.

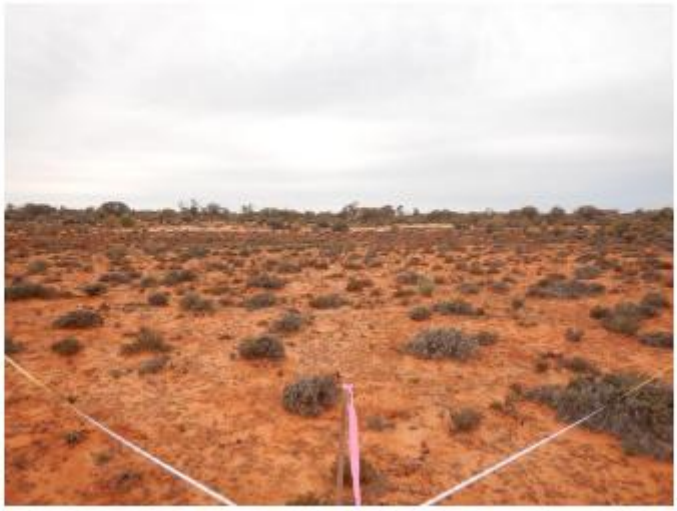
Vegetation description	Associated species/Species richness	Sites
Mixed Low Open Woodland mainly of *Casuarina pauper*, *Eucalyptus oleosa* subsp. *oleosa* or *E. salubris* with a mixed Open Shrubland mainly of *Senna artemisioides* subsp. *filifolia*, *Scaevola spinescens*, *Dodonaea lobulata* and a Low Sparse Shrubland mainly of *Maireana sedifolia*, *Olearia muelleri* and *Atriplex vesicaria*.	*Acacia burkittii*, *Alyxia buxifolia*, *Eremophila decipiens* subsp. *decipiens*, *Eremophila oldfieldii* subsp. *angustifolia*, *Ptilotus obovatus* The average species richness was 14.08 (+/- 2.16).	LRQ019, LRQ026, LRQ028, LRQ029, LRQ032, LRQ033, LRQ035, LRQ036, LRQ037, LRQ038, LRQ040, LRQ041, LRQ042

MLSL: Mixed Low Shrubland / Chenopod Shrubland

This vegetation type occurred on areas fringing seasonally inundated depressions and was mapped over 11.27 ha (0.48%) mainly in the northern section of the Survey Area. Twenty-three native species and no weed species were recorded in this vegetation type. No CSF or Sandalwood was recorded in this vegetation type. *Frankenia pauciflora var. pauciflora*, *Tecticornia* sp. 2 (sterile, Maia Project 2106) and *Maireana glomerifolia* are moderate indicator species for this vegetation type and *Sclerolaena eurotioides* is a low indicator species.

The average vegetation condition was rated as Very Good with 100% of sites rated as Very Good. The main disturbances noted were grazing, animal tracks - trampled vegetation and exploration activities.

Vegetation description	Associated species/Species richness	Sites
Mixed Low Shrubland / Chenopod Shrubland mainly of *Frankenia pauciflora* var. *pauciflora*, *F. setosa* and *Maireana amoena*.	*Atriplex vesicaria*, *Maireana glomerifolia*, *Maireana radiata*, *Sclerolaena eurotioides*, *Tecticornia* sp. 2 (sterile, Maia Project 2106) The average species richness was 12.0 (+/- 2.94)	LRQ022, LRQ048, LRQ054



MOSL (1): Mixed Open Shrubland

This vegetation type occurs on a variety of habitats including hillslopes, undulating plains and minor depressions and was mapped over 390.38 ha (16.50%) of the Survey Area. Seventy-eight native plant species and one introduced weed species (**Salvia verbenaca*) were recorded in this vegetation type. The P2 species *Eremophila praecox* (P2) and the two P3 species *Acacia eremophila* var. Numerous-nerved variant and *Eremophila arachnoides* subsp. *tenera* were recorded in it. *Casuarina pauper* is a poor indicator species for this vegetation type.

The average vegetation condition was rated as Very Good with 62% of sites rated as Very Good, 23% as Good and 15% as Excellent. The main disturbances noted were grazing and animal tracks - trampled vegetation.

Vegetation description	Associated species/Species richness	Sites
Mixed Open Shrubland mainly of *Eremophila scoparia*, *E. decipiens* subsp. *decipiens* and *Dodonaea viscosa* subsp. *angustissima* with a Sparse Low Woodland of *Casuarina pauper* +/- *Eucalyptus lesouefii*.	*Acacia hemiteles*, *Enchylaena tomentosa* var. *tomentosa*, *Eucalyptus yilgarnensis*, *Ptilotus obovatus*, *Senna artemisioides* subsp. *filifolia* The average species richness is 15.69 (+/- 3.41)	LRQ001, LRQ006, LRQ008, LRQ011, LRQ012, LRQ016, LRQ018, LRQ024, LRQ025, LRQ034, LRQ039, LRQ043, LRQ046

MOSL (2): Mixed Open Shrubland

This vegetation type occurred on flat plains and broad drainage flats and was mapped over 532.43 ha (22.50%) of the Survey Area. Quadrats from this group have been mapped as a sub-unit of MLOWL (2) based on the absence of tree species. Forty-two native plant species and no weed species were recorded in the quadrats assessed in this vegetation type. The P3 species *Eremophila arachnoides* subsp. *tenera* was recorded in it as well as Sandalwood (*Santalum spicatum*). *Eremophila metallicorum*, *Santalum spicatum* and *Acacia burkittii* are moderate indicator species for this vegetation type, while *Austrostipa trichophylla* and *Leichhardtia australis* are low indicator species and *Dodonaea lobulata* a poor indicator species.

The average vegetation condition was rated as Very Good with 67% of sites rated as Very Good and 33% rated as Excellent. The main disturbances noted were animal tracks - trampled vegetation, grazing, exploration activities.

Vegetation description	Associated species/Species richness	Sites
Mixed Open Shrubland mainly of *Senna artemisioides* subsp. *filifolia*, *Dodonaea lobulata* and *Scaevola spinescens* with mixed Tall Sparse Shrubs mainly of *Acacia burkittii*, *A. tetragonophylla*, *Eremophila oldfieldii* subsp. *angustifolia* and Isolated Tussock Grasses of *Austrostipa trichophylla*	*Eremophila metallicorum*, *Leichhardtia australis*, *Maireana sedifolia*, *Ptilotus obovatus*, *Santalum spicatum* The average species richness is 21.33 (+/- 2.87)	LRQ017, LRQ023, LRQ027

MSL: Mixed Shrubland

This vegetation type occurred on depressions and areas fringing salt lakes and it was mapped over 44.19 ha (1.87%) in the northern sections of the Survey Area. Quadrats from this group have been mapped as a sub-unit of MLSL based on the presence of and dominance of *Cratastylis subspinescens*, which was absent from quadrats in MLSL. One quadrat (LRQ004) that grouped with quadrats from this vegetation type was moved to vegetation type MLCSL because it was dominated by *Tecticornia* species which is characteristic of vegetation type MLCSL and not MSL. Forty-three native plant species and no weed species were recorded in the quadrats assessed in this vegetation type. No CSF and no Sandalwood was recorded in areas mapped as this vegetation type. *Cratystylis subspinescens* is a moderate indicator species for this vegetation type.

The average vegetation condition was rated as Very Good with 80% of sites rated as Very Good and 20% rated as Excellent. The main disturbances noted were grazing, animal tracks - trampled vegetation and exploration activities.

Vegetation description	Associated species/Species richness	Sites
Mixed Shrubland of *Cratystylis subspinescens, Eremophila scoparia* and *Senna artemisioides* subsp. *filifolia* with a Low Sparse Chenopod Shrubland of *Atriplex vesicaria*.	*Atriplex nummularia* subsp. *spathulata, Enchylaena tomentosa* var. *tomentosa, Eremophila glabra, Frankenia pauciflora* var. *pauciflora, Maireana sedifolia, Olearia muelleri, Sclerolaena diacantha* The average species richness was 15.80 (+/- 5.38)	LRQ003, LRQ005, LRQ014, LRQ047, LRQ050

MTSSL: Mixed Tall Sparse Shrubland

This vegetation type occurred on the dunes fringing Lake Rebecca and was mapped over 1.40 ha (0.06%) of the north-eastern corner of the Survey Area. Two quadrats were sampled outside and adjacent to the Survey Area because of the small area of this vegetation that occurred inside the boundary. Thirty-four native plant species and no weed species were recorded in this vegetation type. No CSF and no Sandalwood was recorded in areas mapped as this vegetation type. *Acacia ramulosa var. ramulosa* and *Eremophila miniata* are perfect indicator species for this vegetation type, while *Acacia caesaneura* (narrow phyllode variant) and *Pimelea microcephala* subsp. *microcephala* are moderate indicator species and *Rhagodia drummondii* and *Enchylaena tomentosa* var. *tomentosa* are low indicators.

Vegetation condition at all sites in this vegetation type was rated as Very Good. The main disturbances noted were grazing, animal tracks - trampled vegetation.

Vegetation description	Associated species/Species richness	Sites
Mixed Tall Sparse Shrubland of *Acacia caesaneura* (narrow phyllode variant), *A. ramulosa* var. *ramulosa* and *Eremophila miniata* with a Low Sparse Shrubland of *Enchylaena tomentosa* var. *tomentosa*, *Rhagodia drummondii* and Isolated Low Trees of *Acacia caesaneura* (narrow phyllode variant)	*Maireana georgei*, *Pimelea microcephala* subsp. *microcephala*, *Pittosporum angustifolium*, *Ptilotus obovatus*, *Senna artemisioides* subsp. *filifolia*, *Solanum lasiophyllum* The average species richness was 20.67 (+/- 4.11)	LRQ010, LRQ058, LRQ059

D.2. Likely conservation status of queried taxa

Extract of the Maia (2022) findings regarding likely conservation status of queried taxa within the application area.

Twenty-three taxa in the species list are queried and could not be determined to species level because they were either infertile / vegetative or not in good enough condition.

Seven were queried species – *Austrostipa* ?*elegantissima*, *Acacia* ?*eremophila* subsp. Numerous-nerved variant, *Chenopodium* ?*desertorum*, *Solanum*?*lasiophyllum*, *Solanum* ?*terraneum*, *Tecticornia* ?*disarticulata* and *Triodia* ?*desertorum* – and if they were the queried species six of them would not be significant because they are not listed species and the seventh, *Acacia* ?*eremophila* subsp. Numerous-nerved variant, was likely *A. eremophila* subsp. Numerous-nerved variant recorded at multiple locations in the Survey Area.

Four were determined to genus but not to species - *Austrostipa* sp., *Eragrostis* sp., *Wurmbea* sp. and *Eucalyptus sp*.. No significant *Eragrostis* or *Wurmbea* species were listed in the database search results, while one *Austrostipa* taxon was – *Austrostipa sp*. Carlingup Road (P3); however, this taxon has not been recorded previously in any of the land systems that occur in the Survey Area. Four significant Eucalyptus species were listed in the search results and two of them (*Eucalyptus pimpiniana* (P3) and *Eucalyptus jutsonii* subsp. jutsonii), have been recorded in land systems that occur in the Survey Area and the specimen could potentially be one of these species. However, *E. pimpiniana* records are all more than about 50 km to the east of the Survey Area and all except one are in the Great Victoria Desert bioregion. *E. jutsonii* subsp. jutsonii records are all more than about 100 km to the south-west, west and north-west of the Survey Area.

Three were queried genera *Amphipogon*, *Panicum* or *Sclerolaena* – and no conservation significant *Amphipogon*, *Panicum* or *Sclerolaena* are currently known to occur in the Eastern Murchison subregion. Eight of the *Tecticornia* collections could not be identified by Dr. K. Shepherd – one was a flowering specimen, and the others were sterile.

Three priority *Tecticornia* species were listed in the database search results (all P1): *Tecticornia flabelliformis*, *Tecticornia mellarium* and *Tecticornia sp*. Lake Way and the closest records for each are more than 90 km away from the Survey Area. While *Tecticornia sp*. Lake Way and *Tecticornia mellarium* have been recorded in one of the same land systems that occurs in the Survey Area – the Carnegie Land System – *Tecticornia sp*. Lake Way records are from lakes to the east of Lake Rebecca and the closest is more than 90 km away. While currently known *Tecticornia mellarium* records occur to the north-east, north-west and south-west of the Survey Area, they are all more than 90 km from the Survey Area.

One collection was identified as *Poaceae* sp. Six significant *Poaceae* species are currently known in the Eastern Murchison Subregion, however, none of them were listed in the database search results and they have not been recorded within 150 km of the Survey Area.

D.3. Fauna recorded by Western Wildlife (2022)

Species	Site 1 Eucalypt woodland	2 Creekline	3 Mulga drainage	4 Sheoak shrubland	5 Eucalypt woodland	6 Eucalypt woodland	7 Stony rise	8 Sandy lake margin	Opportunistic only
Geckoes									
Underwoodisaurus milii		-/3		-/1					
Diplodactylus granariensis	1/-	-/1					1/2	1/-	
Diplodactylus pulcher	1/2	1/1	-/1	2/3	3/1		1/3	1/-	
Gehyra purpurascens			-/1						
Gehyra variegata	1/-		2/3	-/1	1/-		1/1	1/3	
Heteronotia binoei	-/1			-/3	-/1	-/1	-/6	1/2	
Lucasium maini	3/1		1/-	1/2	-/1	-/1	-/1	1/-	
Nephrurus vertebralis								2/3	
Rhynchoedura ornata				1/-					
Dragons									
Ctenophorus cristatus						1/-			
Ctenophorus reticulatus									+
Ctenophorus salinarum		-/1		1/3	-/2		-/2		
Ctenophorus scutulatus		1/-	-/1	-/1	-/2			-/1	
Skinks									
Cryptoblepharus buchananii							-/1		
Cryptoblepharus plagiocephalus		-/1		-/2			1/-		
Ctenotus leonhardii							-/2		
Ctenotus pantherinus			1/-						
Ctenotus schomburgkii			1/-			1/1		-/1	
Ctenotus uber				-/2			1/1		
Egernia depressa		-/1	-/2	-/1			-/2		
Egernia formosa				-/2			-/3		
Eremiascincus richardsonii	1/-		-/1	-/1			-/2	1/-	
Lerista picturata	-/3						-/1	-/1	
Lerista timida	5/1	4/1	2/3	2/1	4/2	3/4		1/-	
Liopholis inornata	-/1		2/3			-/5	-/1	1/2	
Menetia greyii	2/1	1/-	1/-		1/-	-/2	-/1	-/1	
Morethia adelaidensis					1/-		1/-		
Morethia butleri							-/1		
Tiliqua rugosa						1/1	1/-		
Goannas									
Varanus gouldii	2/-						-/1		
Varanus tristis				1/-			1/-		
Pythons									
Morelia spilota									+

Species	Recorded at each Site (Nov/Feb) 1 Eucalypt woodland	2 Creekline	3 Mulga drainage	4 Sheoak shrubland	5 Eucalypt woodland	6 Eucalypt woodland	7 Stony rise	8 Sandy lake margin	Opportunistic only
Blind Snakes									
Anilios bicolor			-/1		-/1	-/1			
Anilios bituberculatus	1/1				2/-				
Elapid Snakes									
Brachyurophis semifasciatus		-/1						1/-	
Pseudechis australis									+
Pseudonaja mengdeni									+
Simoselaps bertholdi					-/1		-/1		
Suta fasciata									+
Suta monachus					1/-		1/-		
Total species:	12	10	13	15	13	9	23	14	5

Note that numbers may represent the same individuals recorded over successive days. + = Opportunistic only.

Species	Birds at each Site (Frequency of occurrence, n=6)								Opportunistic only
	1	2	3	4	5	6	7	8	
	Eucalypt woodland	Creekline	Mulga drainage	Sheoak shrubland	Eucalypt woodland	Eucalypt woodland	Stony rise	Sandy lake margin	
Australian Hobby									+
Australian Magpie					-/1				
Australian Owlet-nightjar					-/1				
Australian Raven	1/-			2/-		1/-	2/4	1/-	
Australian Ringneck	2/1	2/2	2/1	2/3	2/2	3/-	4/1	1/1	
Black-eared Cuckoo				2/-		1/-			
Black-faced Cuckoo-shrike	4/2			2/-	1/-	2/-			
Black-faced Woodswallow				1/1			-/3		
Brown Falcon									+
Brown Honeyeater		1/-							
Brown-headed Honeyeater	-/1	1/1	1/1	1/-	2/1	1/-			
Bush Stone-curlew					1/-				
Chestnut Quail-thrush						1/-			
Chestnut-rumped Thornbill		-/1	2/3	1/3	2/3	-/1	4/3	-/1	
Collared Sparrowhawk						1/-			
Common Bronzewing			-/2						
Crested Bellbird	3/1	2/3	5/2	6/4	5/4	3/-	6/3	4/2	
Crested Pigeon				1/-		2/-	-/3	1/-	
Dusky Woodswallow									+
Emu									+
Galah	1/-	1/-	1/-	1/-	1/-	1/-		1/-	
Gilbert's Whistler		2/-	3/-						
Grey Butcherbird	1/1	1/1		-/1		3/1	6/3		
Grey Currawong	1/2				1/1	2/-	2/-	-/1	
Grey Fantail			1/-						
Grey Shrike-thrush	2/-	4/1	3/-	5/2	2/-	5/-	3/-	1/-	
Grey Teal									+
Ground Cuckoo-shrike									+
Hooded Robin							1/-		
Horsfield's Bronze Cuckoo				1/-	1/-			1/-	
Inland Thornbill	2/-	2/2	4/1	3/5	3/2	4/1	5/3	4/3	
Jacky Winter									+
Little Button-quail			1/-						
Major Mitchell's Cockatoo									+
Malleefowl (vu)									+
Masked Woodswallow									+
Mistletoebird									+

Species	Birds at each Site (Frequency of occurrence, n=6)								Opportunistic only
	1	2	3	4	5	6	7	8	
	Eucalypt woodland	Creekline	Mulga drainage	Sheoak shrubland	Eucalypt woodland	Eucalypt woodland	Stony rise	Sandy lake margin	
Mulga Parrot							4/-		
Pied Butcherbird					1/-			1/4	
Pied Honeyeater									+
Purple-crowned Lorikeet			-/1						
Rainbow Bee-eater		3/-			2/-			1/-	
Red Wattlebird							3/-		
Red-backed Kingfisher									+
Red-capped Robin		2/-	2/1	2/4	-/1				
Redthroat	1/-	1/2	3/2	3/3	2/4		2/3	-/3	
Regent Parrot			1/-			2/-			
Rufous Fieldwren								-/1	
Rufous Whistler	1/-	3/-	2/1		1/-		1/-		
Shy Heathwren									+
Singing Honeyeater	1/1	2/3		3/2	2/3	1/-	4/4	6/5	
Slaty-backed Thornbill				-/2					
Southern Boobook									+
Spiny-cheeked Honeyeater	1/-	1/4	5/-	4/1	1/-	1/-	8/-	4/-	
Splendid Fairy-wren		1/1	2/3	4/4	3/1		1/-		
Spotted Nightjar									+
Striated Pardalote	4/1				1/-	5/-			
Tawny Frogmouth									+
Tree Martin									+
Varied Sittella									+
Variegated Fairy-wren				1/-	1/-		1/-		
Wedge-tailed Eagle									+
Weebill	6/6	4/3	3/5	-/1	3/6	6/5	2/1	1/-	
White-backed Swallow									+
White-browed Babbler		1/2	-/2	3/3	-/1	2/-	3/1	-/1	
White-eared Honeyeater	3/6	-/4	2/2		-/1	1/-			
White-fronted Honeyeater			2/-		1/-		2/-		
White-winged Fairy-wren			1/-	-/1	-/1			3/3	
White-winged Triller	-/1		1/-						
Willie Wagtail				1/1		-/1		2/1	
Yellow-plumed Honeyeater	1/-	3/-	2/-			3/1			
Yellow-rumped Thornbill			1/-	1/-					
Yellow-throated Miner	1/1	1/-			1/-	4/1	1/-	1/1	
Number of bird species:	20	22	26	26	29	25	23	21	20

Species	Recorded at each Site (Nov/Feb)								Opportunistic only
	1	2	3	4	5	6	7	8	
	Eucalypt woodland	Creekline	Mulga drainage	Sheoak shrubland	Eucalypt woodland	Eucalypt woodland	Stony rise	Sandy lake margin	
Native Mammals									
Austronomus australis									A
Chalinolobus gouldii									A
Chalinolobus morio									A
Macropus fuliginosus									+
Ningaui yvonneae								2/2	
Notomys alexis					-/2				
Osphranter robustus									+
Osphranter rufus									+
Ozimops kitcheneri									A
Pseudomys bolami					1/-			1/3	
Pseudomys hermannsburgensis			-/3				-/1		
Scotorepens balstoni									A
Sminthopsis crassicaudata								-/1	
Sminthopsis dolichura		-/2		-/1		-/6	-/1	1/2	
Sminthopsis longicaudata (P4)									+
Tachyglossus aculeatus									+
Vespadelus baverstocki									A
Introduced Mammals									
Bos taurus									+
Camelus dromedarius									+
Canis familiaris									
Equus caballus									+
Mus musculus	-/5				-/8		-/2	1/8	
Oryctolagus cuniculus									+
Total species:	0	0	0	0	1	0	0	4	9

Note that numbers may represent the same individuals recorded over successive days. + = Opportunistic, A = Anabat recording.

D.4. short-range endemic invertebrates recorded by Bennelongia (2022, 2025)

No.	Higher Classification	Lowest Identification	Only in Project area	Survey Collected	Updated SRE Category
	GASTROPODA				
	Stylommatophora				
1	Camaenidae	*Sinumelon nullarboricum*	No	Bennelongia (2022)	Widespread
2		*Sinumelon kalgum*	No	This survey.	Widespread
3	Gastrocoptidae	*Gastrocopta bannertonensis*	No	Bennelongia (2022); this survey.	Widespread
4		*Gastrocopta margaretae*	No	This survey.	Widespread
5	Pupillidae	*Pupilla ficulnea*	No	This survey.	Widespread
6		*Pupoides adelaidae*	No	Bennelongia (2022); this survey.	Widespread
7		*Pupoides myoporinae*	No	Bennelongia (2022); this survey.	Widespread
	ARACHNIDA				
	Pseudoscorpiones				
8	Cheiridiidae	Cheiridiidae `BPS344`	Yes	Bennelongia (2022)	Data Deficient Potential SRE
9	Cheliferidae	Cheliferidae `BPS354`	Yes	Bennelongia (2022)	Data Deficient Potential SRE
10	Chernetidae	*Nesidiochernes* (ex Chernetidae) `BPS343`	No	Bennelongia (2022)	Widespread
11		Chernetidae `BPS351`	Yes	Bennelongia (2022)	Data Deficient Potential SRE
12		Chernetidae `BPS352`	Yes	Bennelongia (2022)	Data Deficient Potential SRE
13		Chernetidae sp. `B02`	No	This survey.	Widespread
14	Garypidae	*Synsphyronus* `BPS353`	Yes	Bennelongia (2022)	Data Deficient Potential SRE
15	Olpiidae	*Beierolpium* 8/4 `BPS345`	Yes	Bennelongia (2022); this survey.	Unlikely Potential SRE
16		*Indolpium `BPS587`*	Yes	This survey.	Data Deficient Potential SRE
	Scorpiones				
17	Buthidae	*Isometroides vescus* s.l.	No	Bennelongia (2022)	Widespread
18		*Lychas* cf. *`splendens`*	No	Bennelongia (2022)	Widespread
19		*Lychas* `SCO039` (annulatus complex) (ex `BSCO067`)	No	Bennelongia (2022)	Widespread
20	Urodacidae	*Urodacus* `BSCO061`	No	Bennelongia (2022)	Widespread

No.	Higher Classification	Lowest Identification	Only in Project area	Survey Collected	Updated SRE Category
21		*Urodacus* `BSCO066`	No	Bennelongia (2022); this survey.	Widespread
	Araneae				
	Mygalomorphae				
22	Anamidae	*Aname* `MYG212`	No	Bennelongia (2022); this survey.	Widespread
23		*Aname simoneae*	No	Bennelongia (2022)	Widespread
24		*Kwonkan* `BMYG180`	Yes	Bennelongia (2022)	Unlikely Potential SRE
25		*Proshermacha* `BMYG179`	Yes	Bennelongia (2022)	Unlikely Potential SRE
26	Barychelidae	*Idiommata* `BMYG181`	Yes	Bennelongia (2022)	Unlikely Potential SRE
27		*Mandjelia* `BMYG182`	Yes	Bennelongia (2022)	Data Deficient Potential SRE
28		*Synothele* `BMYG172`	No	Bennelongia (2022)	Widespread
29	Euagridae	*Cethegus* `MYG050`	No	Bennelongia (2022)	Widespread
30	Idiopidae	*Bungulla bertmaini*	No	Bennelongia (2022); this survey.	Widespread
31		*Idiosoma* `BMYG168`	No	Bennelongia (2022); this survey.	Widespread
32		*Idiosoma* `MYG721`	No	Bennelongia (2022)	Widespread
33		*Idiosoma* sp. Tropicana 1	No	Bennelongia (2022)	Widespread
34	Theraphosidae	*Selenotholus foelschei* s.l.	No	Bennelongia (2022)	Widespread
	Araneomorphae				
35	Hersiliidae	Hersiliidae sp.	No	Bennelongia (2022)	Data Deficient Potential SRE
	MALACOSTRACA				
	Isopoda				
36	Armadillidae	*Buddelundia* `BIS434`	No	Bennelongia (2022)	Unlikely Potential SRE
37		*Buddelundia* `BIS435`	Yes	Bennelongia (2022)	Data Deficient Potential SRE
38		*Buddelundia* `BIS436`	Yes	Bennelongia (2022)	Data Deficient Potential SRE
39		*Buddelundia* `BIS573`	No	This survey.	Widespread
	CHILOPODA				
	Scolopendrida				
40	Scolopendridae	*Scolopendra morsitans*	No	Bennelongia (2022); this survey.	Widespread

No.	Higher Classification	Lowest Identification	Only in Project area	Survey Collected	Updated SRE Category
	DIPLOPODA				
	Polydesmida				
41	Paradoxosomatidae	Paradoxosomatidae sp.	No	Bennelongia (2022)	Data Deficient Potential SRE
	Polyxenida				
42	Polyxenidae	*Unixenus* sp.	No	Bennelongia (2022)	Widespread
43	Synxenidae	*Phryssonotus novaehollandiae*	No	Bennelongia (2022)	Widespread

Species only currently known from the Rebecca Gold Project area are highlighted in pink.

D.5. Fauna habitat

Details of the fauna habitat within the application area as described in Wester Wildlife (2022) are presented in the extract below.

Habitat	Key Habitat Elements	Total Area (ha)
Eucalypt woodland	• Eucalypt hollows provide nesting habitat for birds, roosting habitat for bats and shelter for arboreal reptiles. • Dense leaf litter under trees provide shelter for fossorial reptiles. • Fallen logs provide shelter for reptiles and small mammals. • *Eremophila spp*. provide seasonal resource for nectar-feeding birds.	677.4
Sheoak – chenopod shrubland	• Sheoaks with hollows provide nesting habitat for small birds and hollows/crevices for arboreal fauna. • Dense leaf litter under trees provide shelter for fossorial reptiles. • *Eremophila spp*. provide seasonal resource for nectar-feeding birds.	1,235.8
Mulga drainage	• Potential nesting habitat for the Malleefowl.	161.3
Creekline	• Water-holding depressions may provide breeding habitat for frogs. • Hollows and crevices in large mulga and eucalypts provide roosting and nesting habitat for birds, bats and arboreal reptiles. • Where present, accumulations of leaf litter and fallen logs provide shelter for reptiles. • Mulga trees and taller shrubs provide nesting habitat for birds, particularly where the mulga occurs in dense stands.	88.1
Stony rise	• Cracks and crevices under rocks provide shelter for reptiles and mammals. • Sheoaks with hollows provide nesting habitat for small birds and hollows/crevices for arboreal fauna.	33.2
Sandy lake margins	• Sandy soils provide habitat for fossorial reptiles and burrowing small mammals. • *Eremophila spp*. provide seasonal resource for nectar-feeding birds.	56.9
Salt pan	• Water-holding depressions may provide habitat for shorebirds and other waterbirds.	23.6
Disturbed	• None noted but may be used by some species.	90.3

Appendix E. Sources of information

E.1. GIS datasets

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

- 10 metre contours (DPIRD-073)
- 2 metre contours (DPIRD-072)
- Cadastre (Polygon) (LGATE-217)
- Clearing Instruments Activities (Areas Approved to Clear) (DWER-076)
- Clearing Instruments Conditions (Areas Subject to Conditions) (DWER-077)
- Clearing Instruments Proposals (Areas Applied to Clear) (DWER-075)
- Clearing Regulations - Environmentally Sensitive Areas (DWER-046)
- Clearing Regulations - Schedule One Areas (DWER-057)
- Contaminated Sites Database (DWER-059)
- Contaminated Sites Database - Restricted (DWER-073)
- Directory of Important Wetlands in Australia - Western Australia (DBCA-045)
- Geographic Names (GEONOMA) (LGATE-013)
- Groundwater Salinity Statewide (DWER-026)
- Hydrographic Catchments - Catchments (DWER-028)
- Hydrographic Catchments - Subcatchments (DWER-030)
- IBRA Vegetation Statistics
- IBSA Survey Details (DWER-118)
- Local Government Area (LGA) Boundaries (LGATE-233)
- Localities (LGATE-234)
- Medium Scale Topo Contour (Line) (LGATE-015)
- Medium Scale Topo Elevation (Point) (LGATE-014)
- Medium Scale Topo Inland Flat (Polygon) (LGATE-099)
- Medium Scale Topo Water (Line) (LGATE-018)
- Medium Scale Topo Water (Point) (LGATE-017)
- Medium Scale Topo Water (Polygon) (LGATE-016)
- Mineral Field Boundaries (DMIRS-005)
- Native Title (Determination) (LGATE-066)
- Native Title (Fed Court) (LGATE-005)
- Native Title (ILUA) (LGATE-067)
- Native Title (NNTT) (LGATE-004)
- Native Vegetation Extent (DPIRD-005)
- Pre-European Vegetation (DPIRD-006)
- Public Drinking Water Source Areas (DWER-033)
- Ramsar Sites (DBCA-010)
- Regional Parks (DBCA-026)
- Reserves (LGATE-227)
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Rivers (DWER-036)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Mapping - Best Available (DPIRD-027)
- Soil Landscape Mapping - Project Areas (DPIRD-070)
- Soil Landscape Mapping - Rangelands (DPIRD-063)
- Soil Landscape Mapping - Soil Sites (DPIRD-071)
- Soil Landscape Mapping - Systems (DPIRD-064)
- Soil Landscape Mapping - Western Australia attributed by WA Soil Group (DPIRD-076)
- Soil Landscape Mapping - Zones (DPIRD-017)
- South Coast Significant Wetlands (DBCA-018)
- Surface Water Management Areas (DWER-041)
- Surface Water Management Subareas (DWER-042)
- Townsites (LGATE-248)

- WA Now Aerial Imagery
- WRIMS - Groundwater Areas (DWER-085)
- WRIMS - Groundwater Subareas (DWER-083)
- WRIMS - Surface Water Areas (DWER-082)
- WRIMS - Surface Water Resources (DWER-081)

Restricted GIS Databases used:

- Threatened and Priority Flora (TPFL)
- Threatened and Priority Flora (WAHerb)
- Threatened and Priority Fauna
- Threatened and Priority Ecological Communities
- Threatened and Priority Ecological Communities (Buffers)

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Glossary

Acronyms:

BC Act	*Biodiversity Conservation Act 2016,* Western Australia
BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia (now DPLH)
DAFWA	Department of Agriculture and Food, Western Australia (now DPIRD)
DCCEEW	Department of Climate Change, Energy, the Environment and Water, Australian Government
DBCA	Department of Biodiversity, Conservation and Attractions, Western Australia
DEMIRS	Department of Energy, Mines, Industry Regulation and Safety (now DMPE)
DER	Department of Environment Regulation, Western Australia (now DWER)
DMIRS	Department of Mines, Industry Regulation and Safety, Western Australia (now DMPE)
DMP	Department of Mines and Petroleum, Western Australia (now DMPE)
DMPE	Department of Mines, Petroleum and Exploration
DoEE	Department of the Environment and Energy (now DCCEEW)
DoW	Department of Water, Western Australia (now DWER)
DPaW	Department of Parks and Wildlife, Western Australia (now DBCA)
DPIRD	Department of Primary Industries and Regional Development, Western Australia
DPLH	Department of Planning, Lands and Heritage, Western Australia
DRF	Declared Rare Flora (now known as Threatened Flora)
DWER	Department of Water and Environmental Regulation, Western Australia
EP Act	*Environmental Protection Act 1986*, Western Australia
EPA	Environmental Protection Authority, Western Australia
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth Act)
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
PEC	Priority Ecological Community, Western Australia
RIWI Act	*Rights in Water and Irrigation Act 1914*, Western Australia
TEC	Threatened Ecological Community

Definitions:

DBCA (2023) Conservation Codes for Western Australian Flora and Fauna. Department of Biodiversity, Conservation and Attractions, Western Australia:

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 Biodiversity Conservation Act 2016 (BC Act).

Threatened fauna is the species of fauna that are listed as critically endangered, endangered or vulnerable threatened species.

Threatened flora is the species of flora that are listed as critically endangered, endangered or vulnerable threatened species.

The assessment of the conservation status of threatened species is in accordance with the BC Act listing criteria and the requirements of Ministerial Guideline Number 1 and Ministerial Guideline Number 2 that adopts the use of the International Union for Conservation of Nature (IUCN) Red List of Threatened Species Categories and Criteria, and is based on the national distribution of the species.

CR **Critically endangered species**

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.

EN **Endangered species**

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.

VU **Vulnerable species**

Threatened species considered to be "*facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines*".

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines.

Extinct species

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**

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).

EW **Extinct in the wild species**

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.

Specially protected species

SP **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.

MI **Migratory species**

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).

Migratory species include birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) or 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.

CD **Species of special conservation interest (conservation dependent fauna)**

Species of special conservation need that are 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).

Currently only fauna are listed as species of special conservation interest.

OS **Other specially protected species**

Species 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).

Currently only fauna are listed as species otherwise in need of special protection.

Priority species

P **Priority species**

Priority is not a listing category under the BC Act. The Priority Flora and Fauna lists are maintained by the department and are published on the department's website.

All fauna and flora are protected in WA following the provisions in Part 10 of the BC Act. The protection applies even when a species is not listed as threatened or specially protected, and regardless of land tenure (State managed land (Crown land), private land, or Commonwealth land).

Species that may possibly be threatened species that do not meet the criteria for listing under the BC Act because of insufficient survey 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 prioritisation for survey and evaluation of conservation status so that consideration can be given to potential listing as threatened.

Species that are adequately known, meet criteria for near threatened, or are rare but not threatened, or that have been recently removed from the threatened species list or conservation dependent or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring.

Assessment of priority status 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 One - Poorly-known species – known from few locations, none on conservation lands**

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, for example, 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 for threatened listing and appear to be under immediate threat from known threatening processes. These species are in urgent need of further survey.

P2 **Priority Two - Poorly-known species – known from few locations, some on conservation lands**

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, for example, 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 for threatened listing and appear to be under threat from known threatening processes. These species are in urgent need of further survey.

P3 **Priority Three - Poorly-known species – known from several locations**

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. These species need further survey.

P4 **Priority Four - 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 a conservation dependent specially protected species.

(c) Species that have been removed from the list of threatened species or lists of conservation dependent or other specially protected species, during the past five years for reasons other than taxonomy.

(d) Other species in need of monitoring.

Principles for clearing native vegetation:

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

(b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna.

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.

(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

(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.

(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.

(j) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.