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:	11098/1
Permit type:	Purpose permit
Applicant name:	MLG Oz Limited
Application received:	20 May 2025
Application area:	114.5 hectares
Purpose of clearing:	Sand and gravel mining operations
Method of clearing:	Mechanical clearing
Tenure:	Mining Lease 36/697
Location (LGA area):	Shire of Leonora
Colloquial name:	16 Mine Well

1.2. Description of clearing activities

MLG Oz Limited proposes to clear up to 114.5 hectares of native vegetation within a boundary of approximately 469.58 hectares, for the purpose of sand and gravel mining operations (MLG, 2025a). The project is located approximately 13 kilometres south-east of Leinster, within the Shire of Leonora (MLG, 2025b; GIS Database).

The application is to allow for a small-scale sand and gravel mining operation that will consist of shallow excavation of sand and gravel for use in the construction industry (MLG, 2025b).

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	24 March 2026
Decision area:	114.5 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 a public comment for a period of 21 days, and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (Appendix B), relevant datasets (Appendix G), additional information provided by the applicant (Appendix A), supporting information provided by the applicant including the results of a flora and vegetation survey and fauna survey (Appendix E), the clearing principles set out in Schedule 5 of the EP Act (Appendix C), 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:

- the potential introduction and spread of weeds into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values;
- loss of potentially suitable habitat for brush-tailed mulgara;
- loss of potentially suitable habitat for sandhill grasswren;
- loss of potentially suitable foraging and breeding habitat for malleefowl;
- loss of potentially suitable foraging and breeding habitat for inland hairstreak butterfly;
- loss of some potentially suitable habitat for other conservation significant fauna. It is unlikely these species will be significantly impacted, however it is recommended that trees containing hollows be inspected prior to clearing to avoid clearing any potential roosting or nesting habitat; and
- potential land degradation in the form of wind erosion.

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

The Delegated Officer decided to grant a clearing permit subject to conditions to:

- avoid, minimise to reduce the impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds;
- undertake slow, progressive one-directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity;
- a fauna management (brush-tailed mulgara) condition requiring areas proposed to be cleared be inspected to identify brush-tailed mulgara, and to follow specific management measures should brush-tailed mulgara burrows be identified;
- a fauna management (malleefowl) condition within potentially suitable breeding habitat requiring areas proposed to be cleared between 1 September and 31 January are inspected to identify active (in use) malleefowl mounds, and to maintain a 200 metre buffer around identified active mounds;
- a fauna management (inland hairstreak butterfly) condition requiring areas proposed to be cleared to be surveyed to identify potential critical habitat and inland hairstreak individuals, and maintain a 50 metre buffer around identified inland hairstreak butterfly host plants if individuals are recorded; and
- commence construction no later than three months after undertaking clearing to reduce the risk of erosion.

1.5. Site map

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

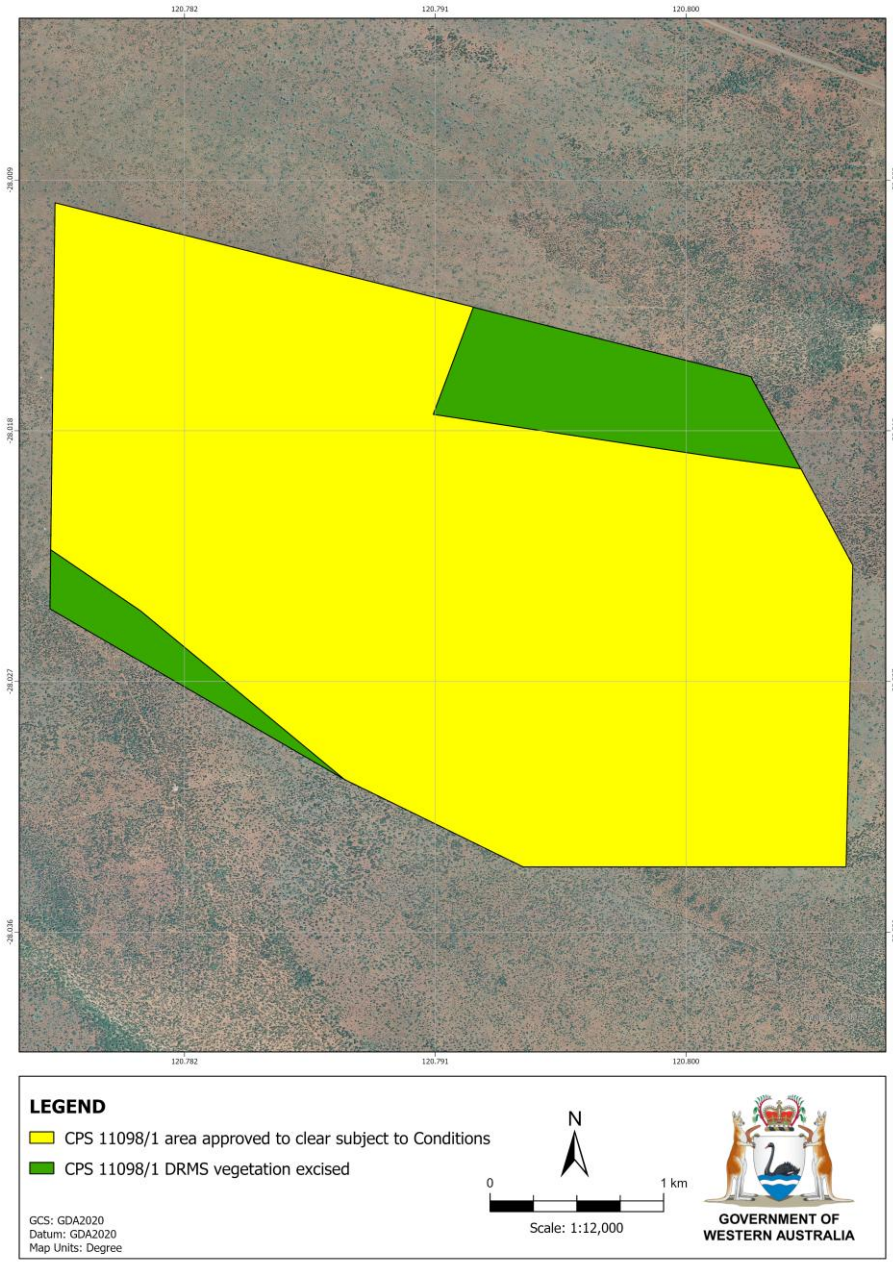

Figure 1. Map of the application area. The shaded yellow area indicates the area within which conditional authorised clearing can occur under the granted clearing permit. The shaded green area was excised from the application area during the assessment.

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)

Relevant agreements (treaties) considered during the assessment include:

- Japan-Australia Migratory Bird Agreement
- China-Australia Migratory Bird Agreement
- Republic of Korea-Australia Migratory Bird Agreement

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)
- Technical guidance – *Sampling of short range endemic invertebrate fauna* (EPA, 2016b)

3. Detailed assessment of application

3.1. Avoidance and mitigation measures

Environmental management measures, outlined in Table 1, were submitted by the applicant in their supporting documentation (MLG, 2025b).

Table 1. MLG's environmental management commitments.

Environment Aspect	Commitment No.	Commitment
Clearing and Topsoil Disturbance	Commitment 1	All clearing will be undertaken in accordance with a Native Vegetation Clearing Permit and the Clearing Procedure
	Commitment 2	All clearing will be undertaken in accordance with a Native Vegetation Clearing Permit and the Clearing Procedure.
	Commitment 3	The clearing request form will require sign off by the Project Manager prior to clearing occurring.
	Commitment 4	The Clearing Procedure will be incorporated into the site induction.
	Commitment 5	Disturbed areas will be rehabilitated progressively and in accordance with the Mine Closure Plan.
Surface Water	Commitment 6	Surface mobile equipment will be maintained throughout the life of the Project to minimise the risk of spillage and/or seepage to the environment.
	Commitment 7	Stormwater management controls, including v-drains, bunds and berms, will be constructed as necessary to direct rainfall away from open excavations.
Flora and Fauna	Commitment 8	All vehicles and equipment arriving on-site will be in a clean condition, free of soil, weeds, seeds and vegetative matter.
	Commitment 9	Should additional populations of priority flora or fauna be identified, MLG Oz will apply the following procedure: • Where possible, priority species will be avoided. • Where priority species cannot be avoided, MLG Oz will liaise with DMIRS and provide a supplementary report on impacts to species prior to any clearing occurring.
	Commitment 10	An assessment of the disturbance footprint will be undertaken post clearing activities and as new aerial imagery or survey data become available.
	Commitment 11	Pre-clearance surveys for conservation significant flora and fauna will be undertaken one month prior to clearing.
	Commitment 12	An understanding of % impacts to Priority species will be maintained.
	Commitment 13	Records will be maintained and made available for internal and external reporting, auditing and improvement.
	Commitment 14	Personnel will be required to adhere to speed limits and drive to road/weather conditions to minimise risks of fauna injuries or death due to traffic.
Air Quality and Noise	Commitment 15	Unsealed surfaces will be watered as required to minimise the generation of dust.
	Commitment 16	During high winds, topsoil stripping and spreading activities will be restricted if dust cannot be adequately controlled.
	Commitment 17	Vehicles and plant will be maintained as per manufacturers specifications to ensure noise and air emissions are minimised.
Workforce and Training	Commitment 18	An environmental and heritage induction and training program will be developed for the Project.

During the assessment, the applicant proposed to excise the DRMS vegetation type from the permit boundary (Section 1.5) to reduce potential impacts to conservation significant fauna and flora, namely Moriarty's trapdoor spider, northern shield-backed trapdoor spider, malleefowl, inland hairstreak butterfly, night parrot, *Korthalsella leucothrix* and *Baeckea* sp. Sandstone (C.A. Gardner s.n. 26 Oct. 1963) (MLG, 2026). The Delegated Officer was satisfied that the applicant has made a reasonable effort to avoid and minimise potential impacts of the proposed clearing on environmental values.

3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (Appendix B) and the extent to which the impacts of the proposed clearing present a risk to biological, conservation, or land and water resource values.

The assessment against the clearing principles identified that the impacts of the proposed clearing present a risk to biological values (fauna and fauna habitat). 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 (fauna) - Clearing principles (a) and (b)

Assessment

Brush-tailed mulgara

Brush-tailed mulgara (*Dasycercus blythi*, P4) are distributed across mature hummock (spinifex) grasslands in sand plains and gibber plains of arid Australia (NESP, 2021; Pavey et al., 2012). The fauna survey recorded brush-tailed mulgara within the application area in the mulga-spinifex sandplain habitat (Appendix E; Western Wildlife, 2022). These records were one day sighting and four secondary signs, which included burrows, scats, tracks and diggings (Western Wildlife, 2022). There are 26 records in the local surrounds (50 kilometres) and many in the broader region (GIS Database). The *Eucalyptus*-spinifex sandplain and mulga-spinifex sandplain provide suitable habitat for this species within the application area (Western Wildlife, 2022).

Sandhill grasswren

Sandhill grasswren (*Amytornis oweni oweni*, P4) (formerly striated grasswren [*Amytomis striatus striatus*]) inhabits sandy habitats with spinifex associations with or without shrubs or light tree cover, preferring areas with tall dense spinifex hummocks (Menkhorst et al., 2017). The fauna survey recorded one day sighting of sandhill grasswren within the application area in the mulga-spinifex sandplain habitat, in the south-eastern corner of the application area (Appendix E; Western Wildlife, 2022). The *Eucalyptus*-spinifex sandplain and mulga-spinifex sandplain provide suitable habitat for this species within the application area (Western Wildlife, 2022).

Malleefowl

Malleefowl (*Leipoa ocellata*; VU) are primarily found in semi-arid to arid shrublands and low woodlands (three to eight metres in height) dominated by mallee and associated habitats, such as broombush (*Melaleuca uncinata*) and native pine (*Callitris* spp.) scrub (DCCEEW, 2024). This species favours mallee that has been long unburnt and ungrazed (DCCEEW, 2024). In Western Australia, malleefowl are also found in shrublands dominated by *Acacia* (DCCEEW, 2024). The species require sandy soil and leaf litter for the construction of a large mound for egg incubation (DCCEEW, 2024). Malleefowl is known from many recent regional records, and an old mound was recorded in the mulga drainage habitat during the fauna survey (Appendix E; Western Wildlife, 2022; GIS Database). Malleefowl will often breed in the same general area year after year, with old mounds being reused or new mounds being constructed (Western Wildlife, 2022). The denser patches within the mulga-spinifex sandplain habitat provides potentially suitable breeding habitat within the application area (Western Wildlife, 2022). Access tracks are the only disturbance proposed for this habitat (MLG, 2025b). GLS (2021) estimated that these areas had a fire age of greater than 20 years, and Western Wildlife (2022) recorded no evidence of recent fire over the application area. Additionally, all vegetation in the application area provides potential foraging habitat (Western Wildlife, 2022). MLG's clearing procedure states that pre-clearance searches for malleefowl mounds will occur by a suitably qualified person, prior to clearing occurring (MLG, 2025b).

Inland hairstreak butterfly

Inland hairstreak butterfly (*Jalmenus aridus*, P2) is data deficient. This species was previously only known to two locations near Kalgoorlie, however, has been recorded from another 10 locations within an area extending approximately 121 kilometres north to south by 42 kilometres east to west (Eastwood et al., 2023). The preferred habitat for this species is summarised as open woodland, *Senna artemisioides* subsp. *filifolia*, variety of flowering shrubs (*Eremophila*, *Scaevola* and *Maireana*) and open areas of well drained exposed ground adjoining the hostplants (Eastwood et al., 2023). Inland hairstreak caterpillars feed on flowers of *Senna artemisioides* subsp. *filifolia* and the butterfly forms an obligate association with ant species *Froggattella kirbii* (Eastwood et al., 2023). *Senna artemisioides* subsp. *filifolia* and *Acacia tetragonophylla* are the two host plant species of inland hairstreak butterflies (Eastwood et al., 2023). Both these species were recorded in the flora survey, along with many of the flowering shrubs that make up the species preferred habitat (GLS, 2021). Potentially suitable habitat within the application area is mapped within SASP and SASP-SAGS vegetation types, due to the presence of these two host species (Appendix E; GLS, 2021). Inland hairstreak was not considered in the fauna survey by Western Wildlife (2022). Although the nearest record is approximately 220 kilometres away, the species is poorly known and represented by very few records, hence it is difficult to determine its pattern of distribution in the region. Without knowing if *Froggattella kirbii* ants are present, it is unknown if the application area provides critical habitat for inland hairstreak (Eastwood et al., 2023).

Moriarty's trapdoor spider and northern shield-backed trapdoor spider

Moriarty's trapdoor spider (*Kwonkan moriartii*, P2) is a short-range endemic (SRE) idiopid trapdoor spider (Invertebrate Solutions, 2022). The females construct a silk-lined burrow in which they reside for their entire life, and the males disperse in search of females and die after mating (Western Wildlife, 2022). The nearest record of this species is approximately 65 kilometres north of the application area (Western Wildlife, 2022; GIS Database). There are only two records of this species in the state, approximately 15 kilometres apart within the Eastern Murchison Interim Biogeographic Regionalisation for Australia

(IBRA) subregion (GIS Database). This spider is poorly known and represented by very few records, hence it is difficult to determine its pattern of distribution in the region (Western Wildlife, 2022).

Northern shield-backed trapdoor spider (*Idiosoma clypeatum*, P3) is a non-SRE mygalomorph spider (Invertebrate Solutions, 2022). The species is associated with *Acacia* woodlands and shrublands on a variety of soil types including sandy, clay and gravel, outside of drainage channels (Western Wildlife, 2022). Invertebrate Solutions (2022) desktop survey identified the nearest record of this species within 20 kilometres of the application area. The northern shield-backed trapdoor spider has a wider distribution through the Murchison and Yalgoo IBRA bioregions and is known from many more records compared to Moriarty's trapdoor spider (Western Wildlife, 2022; GIS Database).

The mulga drainage habitat likely contains soils heavy enough to support burrow construction for these two spider species (Appendix E; GLS, 2021; Western Wildlife, 2022). These occur in the eastern and south-western sections of Mining Lease 36/697 and have increased leaf litter accumulations and higher moisture content (Invertebrate Solutions, 2022). MLG proposed to excise the mulga drainage habitat, where it is mapped as DRMS vegetation type, to avoid possible impacts to the two species of spiders (Section 1.5; MLG, 2026). In the remainder of the application area, the sandy soils of the sand dune and two sandplain habitats are unlikely to be suitable for these spider species (Western Wildlife, 2022).

Night parrot

Night parrot (*Pezoporus occidentalis*, CR) is a cryptic species that are fond in large, mature spinifex grasslands (DCCEEW, 2025; Menkhorst et al., 2019). A passive acoustic survey was not conducted across the application area, which is the most effective field survey technique for night parrot (DBCA, 2024). Habitat critical to the survival of night parrot includes breeding and roosting habitat (DCCEEW, 2025). All vegetation types within the application area contain *Triodia basedowii* (GLS, 2021). GLS (2021) estimated that SASP vegetation type had a fire age of 10 to 20 years, and all other vegetation types (DRMS, SASP-SDSH and SASP-SAGS) had a fire age of greater than 20 years (Appendix E). Western Wildlife (2022) recorded no evidence of recent fire over the application area. It takes 14 years on average for spinifex to regenerate after a fire to a suitable minimum hummock size for roosting (DCCEEW, 2025).

Compared to current recorded night parrot locations, the spinifex in the application area may be shorter and the habitats may be more wooded (Western Wildlife, 2022). Patches of *Triodia* that are low, uniformly less than 0.4 to 0.5 metres in height, are not likely to provide adequate roost sites (DBCA, 2024). *Triodia basedowii* in the application area were recorded to be 0.4 to one metre in height when surveyed in 2021 by GLS, however, have potentially grown in the past five years since. Both roosting and foraging habitat for night parrot is typically very open, with few trees (DBCA, 2024). The habitats in the application area containing mature spinifex are likely not open enough to support night parrot, with current knowledge on the species.

Princess parrot

Princess parrot (*Polytelis alexandrae*, P4) inhabits sand dunes and sand flats in the arid zone of western and central Australia (Commonwealth of Australia, 2008). The vegetation consists of open savanna woodlands and shrublands of scattered eucalypt (including marble gum [*Eucalyptus gongylocarpa*] and mallees) and she-oak (*Casuarina* and *Allocasuarina*) trees, with an understorey of *Acacia* (especially mulga [*Acacia aneura*]), *Cassia*, *Eremophila*, *Grevillea*, *Hakea* and *Senna* shrubs (Commonwealth of Australia, 2008). The ground cover of these habitats is dominated by *Triodia*, as princess parrots feed on their seeds (Commonwealth of Australia, 2008; Higgins, 1999). This species breeds in hollows of large eucalypt trees, including marble gum, river red gum (*Eucalyptus camaldulensis*) and desert oaks (*Allocasuarina decaisneana*) (DEPWS, 2021b; Western Wildlife, 2022). The application area provides potential breeding and foraging habitat for princess parrot (Appendix E; Western Wildlife, 2022). However, the application area is not within the core range of this species, and the nearest record is approximately 70 kilometres away (Western Wildlife, 2022; Commonwealth of Australia, 2008; GIS Database). Princess parrot also frequents *Eucalyptus* or *Allocasuarina* trees in riverine or littoral areas (Commonwealth of Australia, 2008). As there are no watercourses or wetlands located within the application area, the species likelihood of occurrence is lowered.

Other conservation significant fauna

Fork-tailed swift (*Apus pacificus*, MI) and peregrine falcon (*Falco peregrinus*, OS) may forage sporadically over the application area but are not reliant on terrestrial habitat (Commonwealth of Australia, 2008). Breeding habitat is absent from the application area for both species (Australian Museum, 2019; Menkhorst et al., 2019; Western Wildlife, 2022).

Several other species have suitable habitat in the application area (as detailed in Appendix B.4); however, the nearest records are far away, reducing the likelihood of these species occurrence as the application area is out of their core range (GIS Database). Additionally, all fauna habitats within the application area, except for the sand dune habitat, extend out into the surrounding area (Western Wildlife, 2022). However, the sand dune habitat provides lower habitat value for fauna that have the potential to utilise the application area (MLG, 2025b).

Conclusion

Based on the above assessment, the proposed clearing will result in:

- loss of potentially suitable habitat for brush-tailed mulgara;
- loss of potentially suitable habitat for sandhill grasswren;
- loss of potentially suitable foraging and breeding habitat for malleefowl;
- loss of potentially suitable foraging and breeding habitat for inland hairstreak butterfly; and
- loss of some potentially suitable habitat for other conservation significant fauna. It is unlikely these species will be significantly impacted, however it is recommended that trees containing hollows be inspected prior to clearing to avoid clearing any potential roosting or nesting habitat.

The applicant may have notification responsibilities under the EPBC Act for impacts to malleefowl, night parrot, fork-tailed swift, peregrine falcon, princess parrot, greater bilby and great desert skink and their habitats, as set out in the EPBC Act. 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

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

- undertake slow, progressive one-directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity;
- a fauna management (brush-tailed mulgara) condition requiring areas proposed to be cleared be inspected to identify brush-tailed mulgara, and to follow specific management measures should brush-tailed mulgara burrows be identified;
- a fauna management (malleefowl) condition within potentially suitable breeding habitat requiring areas proposed to be cleared between 1 September and 31 January are inspected to identify active (in use) malleefowl mounds, and to maintain a 200 metre buffer around identified active mounds; and
- a fauna management (inland hairstreak butterfly) condition requiring areas proposed to be cleared to be surveyed to identify potential critical habitat and inland hairstreak individuals, and maintain a 50 metre buffer around identified inland hairstreak butterfly host plants if individuals are recorded.

3.3. Relevant planning instruments and other matters

The clearing permit application was advertised on 8 August 2025 by the Department of Mines, Petroleum and Exploration inviting submissions from the public. No submissions were received in relation to this application.

There are no native title claims over the area under application (DPLH, 2026). 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*.

There are no registered Aboriginal Sites of Significance within the application area (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 malleefowl, night parrot, fork-tailed swift, peregrine falcon, princess parrot, greater bilby and great desert skink, 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.

End

Appendix A. Additional information provided by applicant

Summary of comments	Consideration of comment
On 24 February 2026, the applicant provided amended permit boundary where DRMS vegetation type is removed (MLG, 2026).	This information is considered in the assessment of Section 3.1, Section 3.2.1, Principle (a) and Principle (b).

Appendix B. Site characteristics

B.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 (GIS Database). The predominant land uses in the region are grazing, native pastures, UCL, Crown Reserves, mining and conservation (CALM, 2002).
Ecological linkage	According to available databases, the application area does not contain any known or mapped ecological linkages (GIS Database).
Conservation areas	There are no conservation areas within the application area or the local surrounds (20 kilometres) (GIS Database). The nearest conservation area is Wanjarri Nature Reserve, located approximately 40 kilometres north of the application area (GIS Database).
Vegetation description	The application area occurs within the Eastern Murchison subregion (MUR01) of Murchison (GIS Database). The vegetation of the application area is broadly mapped as the following Beard vegetation association: • **18**: Low woodland; mulga (*Acacia aneura*) (GIS Database). A flora and vegetation survey was conducted over the application area by GLS (2021). The first field survey in July 2021 was a reconnaissance survey, and the second field survey in September 2021 was a detailed flora and vegetation survey with targeted searches of priority species. The following four vegetation associations were recorded within the application area (GLS, 2021; Pringle et al., 1994): • **SASP (sandplain spinifex hummock grassland, undifferentiated)**: This group is characterised by deep (> 1 m) sands supporting a dominant hummock grassland (SASP). It may often have a well-developed tree stratum (SAGS), low heath stratum (SAHS) or tall shrub stratum, dominated by *Acacia aneura* (mulga) (SAMU), other wattles (SAWS), or mallees (SAMA). Occasionally, proteaceous tall shrub strata, including *Hakea* and *Grevillea*, can be encountered. Shrub strata, whilst very variable, are generally well developed on sand dunes/ridges (SDSH). • **DRMS (drainage tract mulga shrublands)**: *Acacia fuscaneura*, *E. lucasii* Mixed Low Woodland A (10-30% PFC, 5-15 m) over *A. balsamea* Open Scrub (2-10% PFC, >2 m) over Scattered Shrubs of *Psydrax latifolia* (<25 PFC, 1-2 m) over Mixed Open Dwarf Scrub of *Eremophila foliosissima*, *E. forrestii* subsp *forrestii, E. latrobei* subsp *latrobei*, *Psydrax suaveolens*, *Ptilotus obovatus* and *Abutilon* aff *cryptopetalum* (2-10% PFC. <1 m) over Very Open Grass and Hummock Grass of *Eragrostis eriopoda, E. helmsii* and *Triodia basedowii* (2- 10% PFC, <1 m) on orange sandy silt with approximately 20% leaf litter. • **SASP-SDSH (sandplain spinifex hummock grassland, sand dune shrublands subtype)**: *Eucalyptus gongylocarpa* and *E. youngiana* Open Low Woodland B (2-10% PFC, <5 m) over *Grevillea stenobotrya* and *Acacia jamesiana* Open Scrub (2-10% PFC, >2 m) over *Verticordia* sp. aff *jamesonii* (P3), *Euromyrtus* aff. *maidenii* and *Senna artemisioides* Open Dwarf Scrub (2- 10% PFC ,<1 m) on orange sandy silt with <5% leaf litter. • **SASP-SAGS (sandplain spinifex hummock grassland, *Eucalyptus gongylocarpa* open woodlands subtype)**: *Eucalyptus gongylocarpa* and *E. youngiana* Low Woodland A (10-30% PFC, 5-15 m) over *Acacia caesaneura*, *A. balsamea* and *Psydrax suavolens* Open Scrub (2-10% PFC, >5 m) over *Scaevola spinescens*, *Senna artemisioides, S. artemisioides* subsp *filifolia* and *Acacia caesaneura* Low Scrub (10-30% PFC, 1-2 m) over *Eremophila forrestii* subsp *forrestii*, *Ptilotus obovatus, teucrium teucriifolia, E. fraseri* subsp. *fraseri*, *Psydrax suaveolens* and *Seringia* sp. (sterile) Scattered Low Shrubs (<2% PFC, <1m) over *Triodia basedowii* Open Hummock Grass (10-30% PFC, 0.4 m) on orange sandy silt with approximately 20% leaf litter. Mapping of vegetation types is provided in Appendix E (GLS, 2021).
Vegetation condition	The vegetation survey (GLS, 2021) indicates the vegetation within the proposed clearing area is in Good Trudgen (1991) condition. There is evidence of historical mineral exploration activities and sheep grazing infrastructure in the form of fences, wells, bores and windmills (MLG, 2025b). The full Trudgen (1991) condition rating scale is provided in Appendix D.

Characteristic	Details
Climate and landform	The climate region is arid, with average annual rainfall of 248.3 millimetres, with the highest rainfall typically occurring in February (BoM, 2026; CALM, 2002). Topography in the application area is relatively subdued, with elevations ranging between 490 and 520 metres Australian Height Datum (MLG, 2025b; GIS Database). There are three small sandy ridgelines in the centre of the application area (A J Rayner Consulting, 2022).
Soil description and land degradation risk	The soil within the application area is mapped as the following land system (DPIRD, 2026a; Pringle et al., 1994; GIS Database): • **Bullimore**: gently undulating sandplain with occasional linear dunes and stripped surfaces supporting spinifex grasslands with mallees and *Acacia* shrubs. This system may be susceptible to wind erosion after fire. A soil assessment of three tenements owned by MLG in the surrounding area was undertaken by RPM (2022). The 16 Mine Well project is situated within close proximity to all three other tenements, signifying soil conditions will be similar to those. The assessment concluded: • The materials are loose, pale red-brown aeolian sands with very low plant available water capacity. • Although the sands have a low risk of generating significant amounts of dust, they contain substantial amounts of fine to medium sand-sized particles that are easily mobilised by moderate to strong wind gusts. • The growth of emerging seedlings may be impacted by the associated sandblasting if the area is not thoroughly ripped.
Waterbodies	Minor, shallow creek lines and small drainage lines occur in the application area, which are highly ephemeral (A J Rayner Consulting, 2022). The small local catchment drains in a north-westerly direction towards a minor, unnamed ephemeral drainage line located approximately five kilometres away from the application area (MLG, 2025b; GIS Database). The desktop assessment and aerial imagery indicated that no permanent watercourses transect the area proposed to be cleared (GIS Database).
Hydrogeography	The application area is located within the Goldfields Groundwater Area which is legislated under the *Rights in Water and Irrigation Act 1914* (GIS Database). The nearest Public Drinking Water Source Area is Leonora Water Reserve located approximately 85 kilometres south-east of the application area (GIS Database). There are no Wetlands of National or International Importance within the application area or local surrounds (20 kilometres) (GIS Database). The nearest Wetland of National Importance is Lake Barlee located approximately 125 kilometres south-west of the application area (GIS Database). The groundwater salinity is mapped as 500 to 1,000 milligrams per litre total dissolved solids which is described as fresh to marginal (BoM, 2019; GIS Database).
Flora	There are no records of threatened flora species within the application area or local surrounds (20 kilometres) (GLS, 2021; GIS Database). There are records of six conservation significant flora species within a 20 kilometre radius of the application area (GIS Database).
Ecological communities	There are no records of Threatened Ecological Communities (TECs) or Priority Ecological Communities (PECs) within the application area or local surrounds (20 kilometres) (GLS, 2021; GIS Database). The nearest known TEC is the Depot Springs stygofauna complex (VU) located approximately 70 kilometres west of the application area (GIS Database). The nearest known PEC is the Yandal calcrete groundwater assemblage type on Carey paleodrainage on Yandal Station (P1) located approximately 30 kilometres north of the application area (GIS Database).
Fauna	There are records of three conservation significant fauna species within the application area (Western Wildlife, 2022; GIS Database). There are records of four conservation significant fauna species within a 50 kilometre radius of the application area (Invertebrate Solutions, 2022; GIS Database). A fauna survey (Western Wildlife, 2022) and short-range endemic fauna desktop assessment (Invertebrate Solutions, 2022) identified additional fauna that have been considered.
Fauna habitat	There are four fauna habitats identified within the application area (Western Wildlife, 2022): • ***Eucalyptus*–spinifex sandplain**: Red sandplain and low sandy rises support a very open marble gum (*Eucalyptus gongylocarpa*) woodland over an open *Acacia*, *Eremophila* and *Senna* shrubland over spinifex hummock grassland. • **Mulga–spinifex sandplain**: Red sandplains support a spinifex hummock grassland with a variable cover of mulga (*Acacia aneura*), sometimes with mallee eucalypts. • **Sand dune**: Low red sand dunes supported an open spinifex grassland with scattered marble gums (*Eucalyptus gongylocarpa*) and mallee eucalypts (*Eucalyptus youngiana* and *E. kingsmillii*) over patches of open mixed shrubs such as *Grevillea*, *Eremophila* and *Acacia*.

Characteristic	Details
	• **Mulga drainage**: Red sandy clays support a low, dense woodland of mulga (*Acacia fuscaneura*) with scattered mallee eucalypts (*Eucalyptus lucasii*) over *Acacia* and *Eremophila* shrubs with a sparse grass understorey. The habitats in the application area are relatively common within the Eastern Murchison subregion and are typical of the Bullimore Land System (MLG, 2025b). Mapping of fauna habitat types is provided in Appendix E and representative photos are provided in Appendix F (Western Wildlife, 2022).

B.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					
18	19,892,306.46	19,843,148.07	99.75	1,317,179.00	6.62
Beard vegetation associations - Bioregion (Murchison)					
18	12,403,172.30	12,363,252.47	99.68	614,964.13	4.96

Government of Western Australia (2019)

B.3. Flora analysis table

The following conservation significant flora species have been recorded within 20 kilometres of the application area or in biological surveys (GLS, 2021; GIS Database). The assessment of these species included consideration in field surveys, potentially suitable habitat within the application area, species distribution and known regional records (GLS, 2021; Ross, 2006; WAH, 1998-; GIS Database).

Species name	Suitable habitat features [Yes, Potential, No]	Suitable vegetation type [Yes, Potential, No]	Suitable soil type [Yes, Potential, No]	Distance of closest record to application area (km)	Number of known records (total)	Are surveys adequate to identify? [Yes, No]
Priority 1						
Korthalsella leucothrix	Potential	Potential	No	<10	14	Yes
Priority 3						
Baeckea sp. Sandstone (C.A. Gardner s.n. 26 Oct. 1963)	Yes	Potential	Yes	<15	8	Yes
Bossiaea eremaea	Yes	Yes	Yes	<1, known population adjacent to application area (Appendix E)	19	Yes
Verticordia jamiesonii	No	Potential	No	<15	35	Yes
Priority 4						
Grevillea inconspicua	No	Potential	No	<20	63	Yes
Hemigenia exilis	No	Yes	Yes	<20	45	Yes

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

B.4. Fauna analysis table

The following conservation significant fauna species have been recorded within 50 kilometres of the application area or in biological surveys (Invertebrate Solutions, 2022; Western Wildlife, 2022; GIS Database). The likelihood of occurrence for these species was determined by potentially suitable habitat within the application area, species distribution and known regional records (Australian Museum, 2019; Cogger, 2018; Commonwealth of Australia, 2008; DBCA, 2017; 2020; DCCEEW, 2024; 2025; DEPWS, 2021a; 2021b; Eastwood et al., 2023; Higgins, 1999; Invertebrate Solutions, 2022; Menkhorst & Knight, 2011; Menkhorst et al., 2019; NESP, 2021; Pavey et al., 2012; TSSC, 2019; Western Wildlife, 2022; GIS Database).

Species name	Conservation status	Suitable habitat features [Yes, Potential, No]	Suitable vegetation type [Yes, Potential, No]	Distance of closest record to application area (km)	Are surveys adequate to identify? [Yes, No, N/A]	Likelihood of occurrence within application area [Recorded, Likely, Possible, Unlikely, Very unlikely]
Mammal						
Greater bilby (*Macrotis lagotis*)	VU	Yes	Yes	<40	No	Unlikely
Brush-tailed mulgara (*Dasycercus blyth*i)	P4	Yes	Yes	0	Yes	Recorded
Central long-eared bat (*Nyctophilus major tor*)	P3	Yes	Yes	<225	Yes	Unlikely
Reptile						
Great desert skink (*Liopholis kintorei*)	VU	Yes	Yes	<70	Yes	Unlikely
Bird						
Common greenshank (*Tringa nebularia*)	MI	No	No	<30	N/A	Very unlikely
Fork-tailed swift (*Apus pacificus*)	MI	Yes	Yes	<105	Yes	Possible
Grey falcon (*Falco hypoleucos*)	VU	No	No	<135	Yes	Unlikely
Malleefowl (*Leipoa ocellata*)	VU	Yes	Yes	0	Yes	Recorded
Night parrot (*Pezoporus occidentalis*)	CR	Yes	Yes	<180	No, considered in fauna survey but survey method inadequate	Possible
Oriental plover (*Charadrius veredus*)	MI	No	No	<175	N/A	Very unlikely
Peregrine falcon (*Falco peregrinus*)	OS	No	Yes	<30	Yes	Possible
Princess parrot (*Polytelis alexandrae*)	P4	Yes	Yes	<70	Yes	Possible
Sandhill grasswren (*Amytornis oweni oweni*)	P4	Yes	Yes	0	Yes	Recorded
Invertebrate						
Arid bronze azure butterfly (*Ogyris petrina*)	CR	No	Potential	<235	Yes	Unlikely
Inland hairstreak (*Jalmenus aridus*)	P2	Yes	Yes	<220	No	Possible
Moriarty's trapdoor spider (*Kwonkan moriartii*)	P2	Yes	Yes	<65	Yes	Possible
Northern shield-backed trapdoor spider (*Idiosoma clypeatum*)	P3	Yes	Yes	<20	No	Possible

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, MI: migratory, CD: conservation dependent, OS: other specially protected, P: priority

Appendix C. 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 area proposed to be cleared contains significant habitat for conservation significant fauna. The area proposed to be cleared is not known to contain conservation significant flora. No weed species declared under the *Biosecurity and Agriculture Management Act 2007* or listed as a Weed of National Significance (WoNS) under the EPBC Act were recorded within the application area (DPIRD, 2026b; GLS, 2021). Weeds have the potential to significantly change the dynamics of a natural ecosystem and lower the biodiversity of an area.	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 significant habitat for conservation significant fauna.	At variance	Yes *Refer to Section 3.2.1, above.*
Principle (c): *"Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."* Assessment: The area proposed to be cleared is unlikely to contain flora species listed under the BC Act (GLS, 2021; GIS Database). One sterile specimen of a *Seringa* species that was recorded within the application area during the flora survey (GLS, 2021) was identified as potentially being threatened flora, *Seringia exastia*. The recorded location is provided in Appendix E. This threatened species has since been delisted and is now a common flora.	Not likely to be at variance	No
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: There are no known TECs or PECs located within or in close proximity to the application area (20 kilometres) (GLS, 2021; 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 extent of the mapped vegetation type is consistent with the national objectives and targets for biodiversity conservation in Australia (Commonwealth of Australia, 2001; Government of Western Australia; 2019). The vegetation proposed to be cleared is not considered to be part of a significant ecological linkage in the local area (GIS Database).	Not 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: Given the distance to the nearest conservation area (approximately 40 kilometres), the proposed clearing is not likely to have an impact on the environmental values of nearby conservation areas (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 watercourses or wetlands recorded within the application area (A J Rayner Consulting, 2022; GIS Database). There are some minor, shallow creek lines in the application area which are highly ephemeral (A J Rayner Consulting,	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
2022). Surveys by GLS (2021) and Western Wildlife (2022) recorded mulga drainage vegetation. As this vegetation type has been excised from the permit boundary by the applicant, no drainage vegetation is anticipated to be impacted by the proposed clearing.		
Principle (g): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."* Assessment: The Bullimore system may be susceptible to wind erosion when native vegetation cover is removed (DPIRD, 2026a; Pringle et al., 1994). MLG (2025b) states that they will maintain a maximum of 10 hectares of disturbance of open borrow pits at any point in time. The likelihood of erosion can be further reduced by a staged clearing condition to utilise cleared areas within three months of conducting clearing.	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: Given no permanent watercourses, wetlands or Public Drinking Water Sources Areas are recorded within the application area (GIS Database), the proposed clearing is unlikely to cause deterioration in surface or ground water quality.	Not likely to 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: Given no watercourses or wetlands are recorded within the application area (GIS Database), the elevated position in the landscape, and the absence of any significant upstream catchment area (MLG, 2025b), the proposed clearing is unlikely to contribute to waterlogging or increase the incidence or intensity of flooding.	Not likely to be at variance	No

Appendix D. 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.

Considering its location, the scale below was used to measure the condition of the vegetation proposed to be cleared. This scale has been extracted from 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.

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 E. Vegetation and fauna habitat mapping

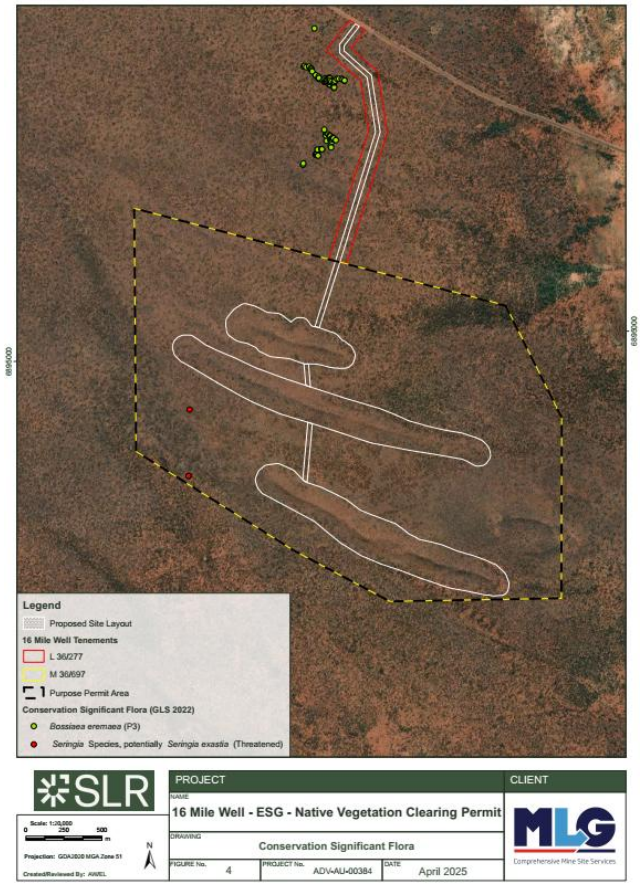

Figure 2. Mapping of conservation significant flora within the proposed application area and surrounds (GLS, 2021; MLG, 2025b).

Figure 3. Mapping of vegetation communities within the proposed application area and surrounds (GLS, 2021; MLG, 2025b).

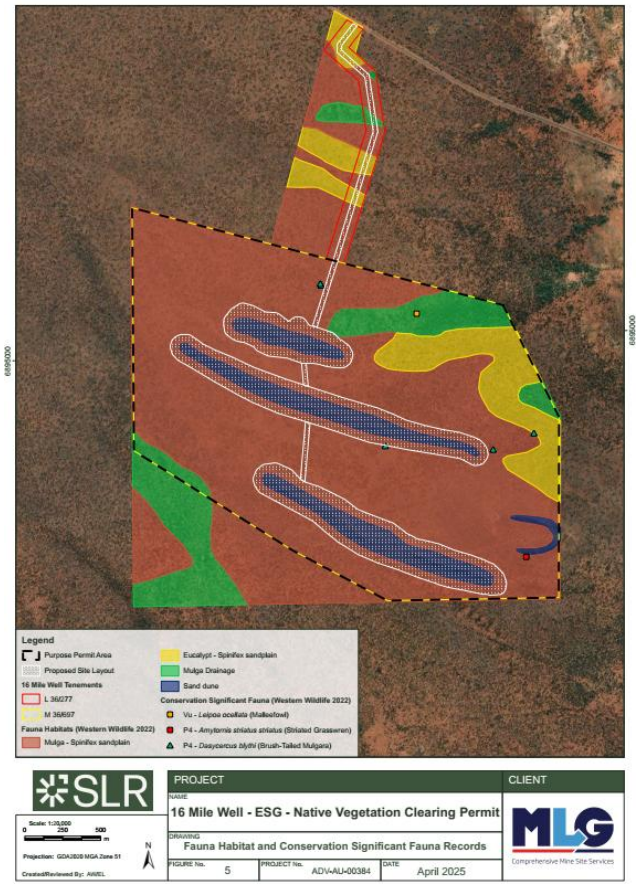

Figure 4. Mapping of fauna habitats and conservation significant fauna within the proposed application area and surrounds (MLG, 2025b; Western Wildlife, 2022).

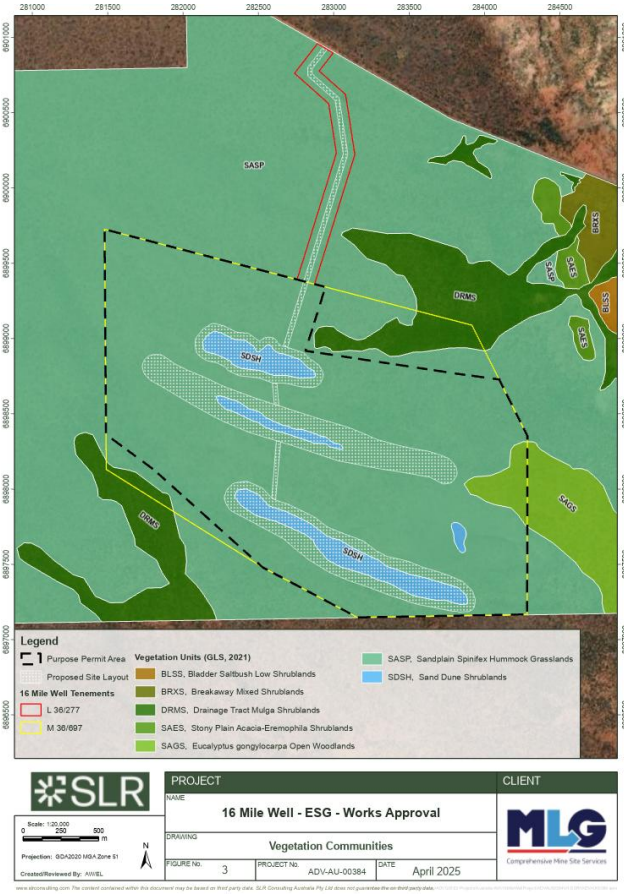

Figure 5. Mapping of applicant's proposed reduced permit boundary with DRMS vegetation excised (GLS, 2021; MLG, 2026).

Appendix F. Representative photos of fauna habitats

Photo 1: *Eucalyptus*-spinifex sandplain (Western Wildlife, 2022).

Photo 2: Mulga-spinifex sandplain (Western Wildlife, 2022).

Photo 3: Sand dune (Western Wildlife, 2022).

Photo 4: Mulga drainage (Western Wildlife, 2022).

Appendix G. Sources of information

G.1. GIS datasets

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

- 10 metre contours (DPIRD-073)
- Cadastre (Polygon) (LGATE-217)
- Clearing Instruments Activities (Areas Approved to Clear) (DWER-076)
- Clearing Regulations - Environmentally Sensitive Areas (DWER-046)
- Clearing Regulations - Schedule One Areas (DWER-057)
- DBCA - Lands of Interest (DBCA-012)
- DBCA - Legislated Lands and Waters (DBCA-011)
- DBCA Fire History (DBCA-060)
- Directory of Important Wetlands in Australia - Western Australia (DBCA-045)
- Groundwater Salinity Statewide (DWER-026)
- IBRA Vegetation Statistics
- IBSA Survey Details (DWER-118)
- Local Government Area (LGA) Boundaries (LGATE-233)
- Localities (LGATE-234)
- Native Title (Determination) (LGATE-066)
- 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)
- Townsites (LGATE-248)
- WA Now Aerial Imagery
- Wild Rivers (DWER-087)

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.