

1. Application details and outcomes

1.1. Permit application details

Permit number:	10121/3
Permit type:	Purpose Permit
Applicant name:	Mt Ida Gold Pty Ltd
Application received:	21 May 2024
Application area:	338 hectares
Purpose of clearing:	Mineral production and associated activities
Method of clearing:	Mechanical Removal
Tenure:	Mining Lease 29/2 Mining Lease 29/165 Mining Lease 29/444
Location (LGA area/s):	Shire of Menzies
Colloquial name:	Mt Ida Lithium Project

1.2. Description of clearing activities

Mt Ida Lithium Project proposes to clear up to 338 hectares of native vegetation within a boundary of approximately 618 hectares, for the purpose of mineral production and associated activities. The project is located approximately 82 kilometres north-west of Menzies, within the Shire of Menzies.

The application is to allow for the development of Mt Ida mining activities including: open pit and underground mining; establishment of Waste Rock Landform (WRL); establishment of topsoil stockpiles; establishment of mining infrastructure; and establishment of a transport and service infrastructure corridor.

Clearing permit CPS 10121/1 was granted by the Department of Mines, Industry Regulation and Safety (now the Department of Energy, Mines, Industry Regulation and Safety) on 11 May 2023 and was valid from 3 June 2023 to 30 June 2028. The permit authorised the clearing of up to 246 hectares of native vegetation within a boundary of approximately 543 hectares, for the purpose of mineral production and associated activities.

CPS 10121/2 was granted on 26 October 2023, amending the permit to correct an administrative error. An incorrect permit boundary was placed on the approved permit, however the assessment was undertaken against a larger permit boundary. This amendment is to rectify this administrative error.

On 21 May 2024, the Permit Holder applied to amend CPS 10121/2 to increase the total area of clearing by 92 hectares and the permit boundary by 75 hectares.

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	31 October 2024
Decision area:	338 hectares of native vegetation

1.4. Reasons for decision

This clearing permit application was submitted, accepted, assessed, and determined in accordance with sections 51KA(1) of the *Environmental Protection Act 1986* (EP Act). The Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) 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 A), relevant datasets (Appendix E), supporting information provided by the applicant including the results of a flora and vegetation 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:
CPS 10121/3

- the potential introduction and spread of weeds into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values;
- potential impacts to riparian vegetation and water flows; and
- potential land degradation in the form of erosion.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (see 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;
- avoid clearing riparian vegetation where possible, where drainage lines are impacted, maintain waterflows; and
- commence mineral production or associated activities no later than six months after undertaking clearing to reduce the risk of erosion.

The assessment has not changed since the assessment for CPS 10121/2, except in the case of principles (e) and (g). The variance for principle (e) was changed due to a review of the statistical information provided by the Government of Western Australia (2019). The remaining extent of native vegetation in the region remains the same. The variance for principle (g) was changed after a detailed review of the application area and the landscape features present such as drainage lines that are more susceptible to erosion from clearing activities. The Delegated Officer determined that the proposed increase of the permit boundary and the amount of clearing is not likely to lead to an unacceptable risk to environmental values.

1.5. Site map

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

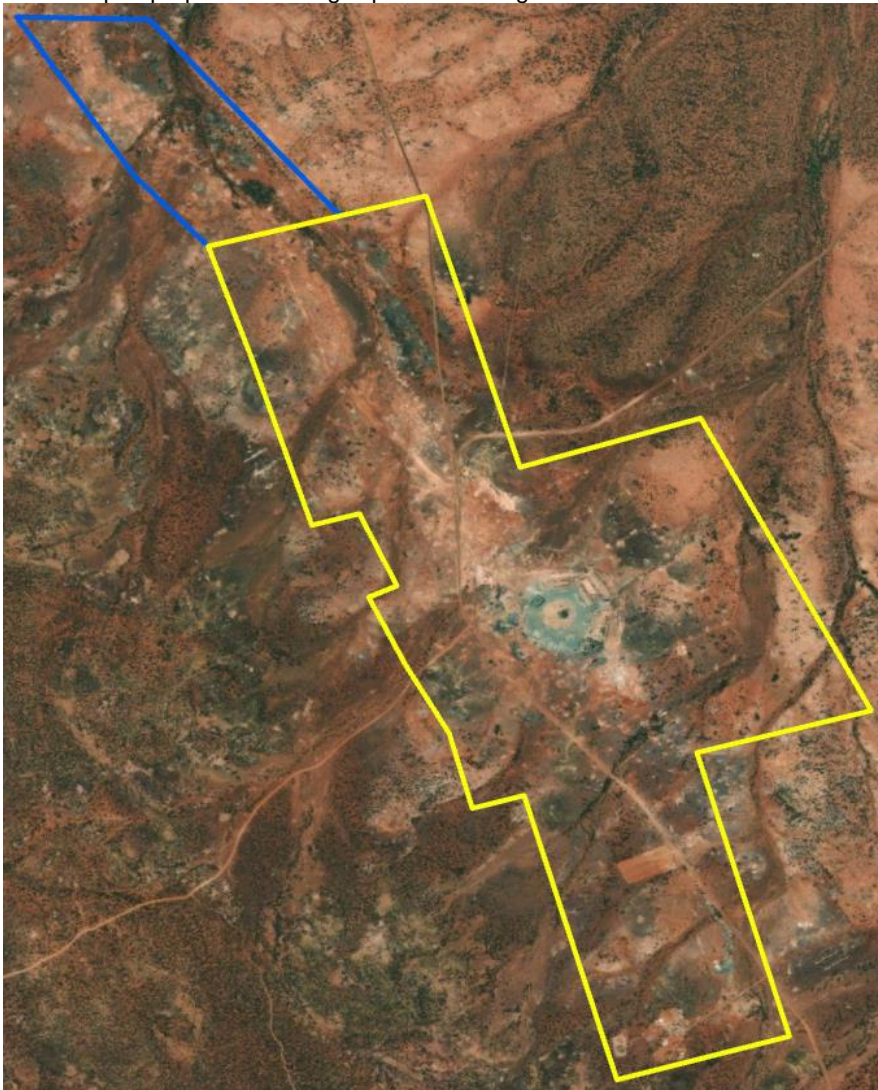


Figure 1. Map of the application area. The yellow area indicates the area approved to clear under CPS 10121/2. The blue line indicates the additional area proposed for this clearing.

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 (see 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)

Relevant agreements (treaties) considered during the assessment include:

- Japan-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, 2016)
- Technical guidance – *Terrestrial Fauna Surveys for Environmental Impact Assessment* (EPA, 2020)

3. Detailed assessment of application

3.1. Avoidance and mitigation measures

The Permit Holder has indicated that they are committed to appropriately managing its activities and ensuring any potential impacts to the environment are managed appropriately. Clearing has been minimised to the extent possible and existing accessed roads will be utilised where practical (Mt Ida Gold, 2024). They also stated the following measures will be taken during clearing activities.

To minimise the further spread of weed species, the Permit Holder and any contractors commissioned, will complete a Weed, Seed, and Hygiene Certificate prior to arrival upon site and adhere to hygiene procedures to minimise the risk of spreading or introducing weeds within the proposed Purpose Permit Area. Further controls will be placed on vehicles leaving site if the vehicle is considered to have traversed weed-impacted areas (DLI, 2024).

In areas where topsoil has been disturbed it will be spread back over the area and rehabilitated according to the specifications of the Permit Holder's Mine Closure Plan and seeded with local native species. Rehabilitation monitoring will be undertaken on all substantial rehabilitation areas within one year of seeding to determine whether germination and establishment has been successful. Ongoing monitoring will determine if further management measures are required, including re-seeding or other interventions (DLI, 2024).

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 (see Appendix A) 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 (see Appendix B) identified the impacts of the proposed clearing are limited and able to be managed to be environmentally acceptable with standard avoid and minimize, hygiene, and staged clearing conditions.

A review of current environmental information (Appendix A) reveals that the assessment against the clearing principles has not changed significantly from the Clearing Permit Decision Report CPS 10121/2.

The additional proposed clearing is unlikely to contain conservation significant flora or fauna. The vegetation present in the amendment area is common and widespread outside of the application area. The additional proposed clearing area does not form part of any known or mapped Priority or Threatened Ecological Communities. The additional proposed clearing area is not considered to be significant as a remnant of native vegetation in an area that has been extensively cleared. Several drainage lines are present in the application area, the clearing permit will manage impacts to riparian vegetation and water flows with a watercourse management condition. The amendment application area is not located within any known or mapped conservation areas. The additional proposed clearing is located within land systems that are considered to be vulnerable to erosion if

vegetation and soil are disturbed, especially in drainage zones and breakaway footslopes. There are no permanent watercourses or wetlands within the amendment application area.

3.3. Relevant planning instruments and other matters

The clearing permit amendment application was advertised on 6 September 2024 by the Department of Energy, Mines, Industry Regulation and Safety 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, 2024). 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, 2024). 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.

Other relevant authorisations required for the proposed land use include:

- A Mining Proposal / Mine Closure Plan 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. 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. It is adjacent to the existing Mt Ida Lithium mining operation (GIS Database).
Ecological linkage	As the application area adjacent to an existing mine and is to allow for the expansion of mining activities, it is not considered to be an ecological linkage to other areas of vegetation. The project area does not provide an important ecological linkage or terrestrial fauna movement corridor (Terrestrial Ecosystems, 2023).
Conservation areas	The application area is not located within any known or mapped conservation areas. The nearest conservation area is the ex Bulga Downs Pastoral lease which is located approximately 43 kilometres north west of the application area (GIS Database).
Vegetation description	<p>The vegetation of the application area is broadly mapped as the following Beard vegetation associations:</p> <p>18: Low woodland; mulga (<i>Acacia aneura</i>); and 39: Shrublands; mulga scrub (GIS Database).</p> <p>A flora and vegetation survey was conducted over the application area by Native Vegetation Solutions during May, 2022 and January 2023. The following vegetation associations were recorded within the application area (NVS, 2023):</p> <ul style="list-style-type: none"> • Mulga over <i>Maireana sedifolia</i> and sclerophyll shrubland; • Creekline vegetation; • Mulga woodland; • Open chenopod shrubland with occasional Mulga overstory; • <i>Acacia burkittii</i> shrubland; • <i>Hakea preissii</i> over open chenopod shrubland; • <i>Acacia quadrimarginea</i> over <i>Eremophila platycalyx</i> and Senna shrubland over laterite hills; and • Mulga over Ironstone outcrops.
Vegetation condition	<p>The vegetation survey (NVS, 2023) and aerial imagery indicate the vegetation within the proposed clearing area is in Very Good to Completely Degraded (Trudgen, 1991) condition.</p> <p>The full Trudgen (1991) condition rating scale is provided in Appendix C. Representative mapping is available in Appendix D.</p>
Climate	The application area is located in an arid zone of Western Australia, with an annual rainfall average of approximately 252.2 millimetres (BoM, 2024).
Soil description	The soil within the application area is mapped as soil unit BE3 (GIS Database). This soil unit is described as broken slopes and ridges characterized by breakaways, generally on gneissic granites and allied rocks; ironstone gravel pavement variably present: chief soils seem to be shallow earthy loams underlain by a red-brown hardpan (Northcote et al., 1960-68).
Land systems and erosion risk	<p>The application area falls within the Bevon, Gransal, and Nubev land systems (DPIRD, 2024). These land systems are described as (Pringle et al., 2004):</p> <p>Bevon land system: Irregular low ironstone hills with stony lower slopes supporting mulga shrublands. Minor areas with texture contrast soils on breakaway footslopes and narrow drainage tracts are susceptible to soil erosion, particularly if perennial shrub cover is substantially reduced or the soil surface is disturbed.</p> <p>Gransal land system: Stony plains and low rises on granite, supporting mainly halophytic shrublands. Breakaway footslopes and alluvial plains are respectively highly and moderately susceptible to water erosion in areas where perennial shrub cover is substantially reduced. Disturbance of soil surface on these units and on saline stony plains is also likely to initiate soil erosion.</p> <p>Nubev land system: Gently undulating stony plains, minor limonitic low rises and drainage floors, supporting mulga and halophytic shrublands. Drainage zones are moderately susceptible to soil erosion, particularly where perennial shrub cover is substantially reduced or the soil surface is disturbed. Disturbance of the protective stone mantle on saline stony plains is also likely to initiate water erosion.</p>
Waterbodies	The desktop assessment and aerial imagery indicated that various, non-perennial watercourses transect the area proposed to be cleared (GIS Database).
Hydrogeography	The application area is located in the Goldfields Groundwater Area, legislated by the RIWI Act 1914. The mapped groundwater salinity ranges from 1,000-3,000 milligrams per litre total dissolved solids, which is considered to be brackish (GIS Database).

Characteristic	Details
Flora	No Threatened or Priority flora species have been recorded in the application area (NVS, 2023; GIS Database). There are records of five Priority flora species (see Appendix A.2) within 20 kilometres of the application area (GIS Database).
Ecological communities	The application area does not intersect any known or mapped Threatened or Priority Ecological Communities (NVS, 2023; GIS Database).
Fauna	No Threatened or Priority fauna species were recorded in the application area (Terrestrial Ecosystem, 2023). One migratory bird has been previously recorded in the application area and three other conservation significant species were recorded within 20 kilometres of the application area (GIS Database).
Fauna habitat	The project area supports one broad fauna habitat of mixed mulga, acacia and chenopod shrubland (Terrestrial Ecosystems, 2023).

A.2. Flora analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix E.1), and biological survey information, impacts to the following conservation significant flora required further consideration.

Species name	Conservation status	Suitable habitat features? [Y/N]	Distance of closest record to application area (km)	Number of known records (WA Herbarium)	Are surveys adequate to identify? [Y, N, N/A]
<i>Calotis</i> sp. Perrinvale Station	P3	Y	9 km	24	Y
<i>Calytrix hislopii</i>	P3	Y	9 km	8	Y
<i>Hemigenia exilis</i>	P4	Y	0.18 km	45	Y
<i>Homalocalyx grandiflorus</i>	P3	N	13.7 km	16	Y
<i>Jacksonia lanicarpa</i>	P1	Y	4.5 km	12	Y

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority (NVS, 2023; Western Australian Herbarium, 1998-; GIS Database)

A.3. Fauna analysis table

Four conservation significant species have been recorded within 20 kilometres of the application area (GIS Database).

Species name	Conservation status	Suitable habitat features? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
Malleefowl (<i>Leipoa ocellata</i>)	VU	N	8.3 km	29,461	Y
Brush-tailed mulgara (<i>Dasycercus blythi</i>)	P4	N	7.2 km	1,069	Y
Long-tailed dunnart (<i>Sminthopsis longicaudata</i>)	P4	N	9.5 km	282	Y
Streaked shearwater (<i>Calonectris leucomelas</i>)	MI	N	0 km	17	Y

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority (Terrestrial Ecosystems, 2023; GIS Database)

Appendix B. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
<p>Principle (a): "Native vegetation should not be cleared if it comprises a high level of biodiversity."</p> <p><u>Assessment:</u></p> <p>The area proposed to be cleared is not known to contain conservation significant flora, fauna, habitats, or assemblages of plants. Some of the study area is highly disturbed or cleared and is therefore largely devoid of terrestrial vertebrate fauna (Terrestrial Ecosystems, 2023). The new amendment area does not form part of any known or mapped Priority Ecological Communities (NVS, 2023; GIS Database).</p>	<p>Not likely to be at variance</p> <p>as per CPS 10121/2</p>	No

Assessment against the clearing principles	Variance level	Is further consideration required?
<p>Seven weed species were recorded in the application area. Two of those species are considered Declared Pests under the BAM Act 2007 (<i>Opuntia stricta</i> and <i>Cylindropuntia imbricata</i>).</p> <p>Weeds have the potential to significantly change the dynamics of a natural ecosystem and lower the biodiversity of an area. Potential impacts to the biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.</p>		
<p><u>Principle (b):</u> <i>“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.”</i></p> <p><u>Assessment:</u></p> <p>Fauna habitat types represented in the application area are abundant and in similar condition in adjacent areas. Therefore, the fauna assemblage that is present in the application area will also be present and abundant in the adjacent areas (Terrestrial Ecosystems, 2023).</p> <p>GIS Database records show a specimen of a streaked shearwater, collected for the Western Australian Museum, inside the application area. However, given this species is a seabird, there are no permanently inundated bodies of water in the application area, and the accuracy of the location records is listed as low, it is likely that this specimen was collected from a location outside of the application area. If present, given the species is a migratory bird, it is likely to be a vagrant species in the area and unlikely to be impacted by the proposed clearing.</p>	<p>Not likely to be at variance</p> <p>as per CPS 10121/2</p>	<p>No</p>
<p><u>Principle (c):</u> <i>“Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.”</i></p> <p><u>Assessment:</u></p> <p>There are no known records of Threatened flora within the application area (GIS Database). A flora survey of the application area did not record any species of Threatened flora (NVS, 2023).</p>	<p>Not likely to be at variance</p> <p>as per CPS 10121/2</p>	<p>No</p>
<p><u>Principle (d):</u> <i>“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.”</i></p> <p><u>Assessment:</u></p> <p>There are no known Threatened Ecological Communities (TECs) located within or near the application area (GIS Database). A flora and vegetation survey of the application area did not identify any TECs (NVS, 2023).</p>	<p>Not likely to be at variance</p> <p>as per CPS 10121/2</p>	<p>No</p>
<p>Environmental value: significant remnant vegetation and conservation areas</p>		
<p><u>Principle (e):</u> <i>“Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.”</i></p> <p><u>Assessment:</u></p> <p>The application area falls within the Murchison Bioregion of the Interim Biogeographic Regionalisation for Australia (GIS Database). Approximately 99% of the pre-European vegetation still exists in the Murchison Bioregion (Government of Western Australia, 2019). The application area is broadly mapped as Beard vegetation associations 18 and 39 (GIS Database). Approximately 99% of the pre-European extent of these vegetation associations remains uncleared at both the state and bioregional level (Government of Western Australia, 2019).</p>	<p>Not at variance</p> <p>changed from CPS 10121/2</p>	<p>No</p>
<p><u>Principle (h):</u> <i>“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></p> <p><u>Assessment:</u></p> <p>Given the distance to the nearest conservation area (GIS Database), the proposed clearing is not likely to have an impact on the environmental values of known or mapped conservation areas.</p>	<p>Not likely to be at variance</p> <p>as per CPS 10121/2</p>	<p>No</p>
<p>Environmental value: land and water resources</p>		
<p><u>Principle (f):</u> <i>“Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.”</i></p>	<p>At variance</p>	<p>No</p>

Assessment against the clearing principles	Variance level	Is further consideration required?
<p><u>Assessment:</u></p> <p>The application area has several minor ephemeral drainage lines (GIS Database). Drainage lines within the application area are poorly defined and are only likely to flow following major rainfall events. As the vegetation associated with these ephemeral drainage lines may be cleared, it is recommended to maintain surface water flow or reinstate downstream into existing natural drainage lines.</p> <p>Potential impacts to watercourses may be managed through the implementation of a vegetation management condition, which includes avoiding clearing riparian vegetation and maintaining surface water flow.</p>	as per CPS 10121/2	
<p><u>Principle (g):</u> <i>"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."</i></p> <p><u>Assessment:</u></p> <p>The mapped soils are moderately to highly susceptible to erosion, especially in drainage zones and breakaway footslopes (Pringle et al., 1994). Noting the location of the application area, the proposed clearing is likely to cause appreciable land degradation.</p> <p>Potential land degradation impacts from the proposed clearing can be managed by a staged clearing condition to prevent cleared areas from being exposed for long periods of time.</p>	<p>May be at variance</p> <p>changed from CPS 10121/2</p>	No
<p><u>Principle (i):</u> <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."</i></p> <p><u>Assessment:</u></p> <p>Given no permanent water courses, wetlands, or Public Drinking Water Source Areas are recorded within the application area (GIS Database), the proposed clearing is unlikely to cause deterioration in the quality of surface or underground water.</p>	<p>Not likely to be at variance</p> <p>as per CPS 10121/2</p>	No
<p><u>Principle (j):</u> <i>"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding."</i></p> <p><u>Assessment:</u></p> <p>Given no permanent water courses or wetlands are recorded within the application area (GIS Database), the proposed clearing is unlikely to cause, or exacerbate, the incidence or intensity of flooding.</p>	<p>Not likely to be at variance</p> <p>as per CPS 10121/2</p>	No

Appendix C. Vegetation condition rating scale

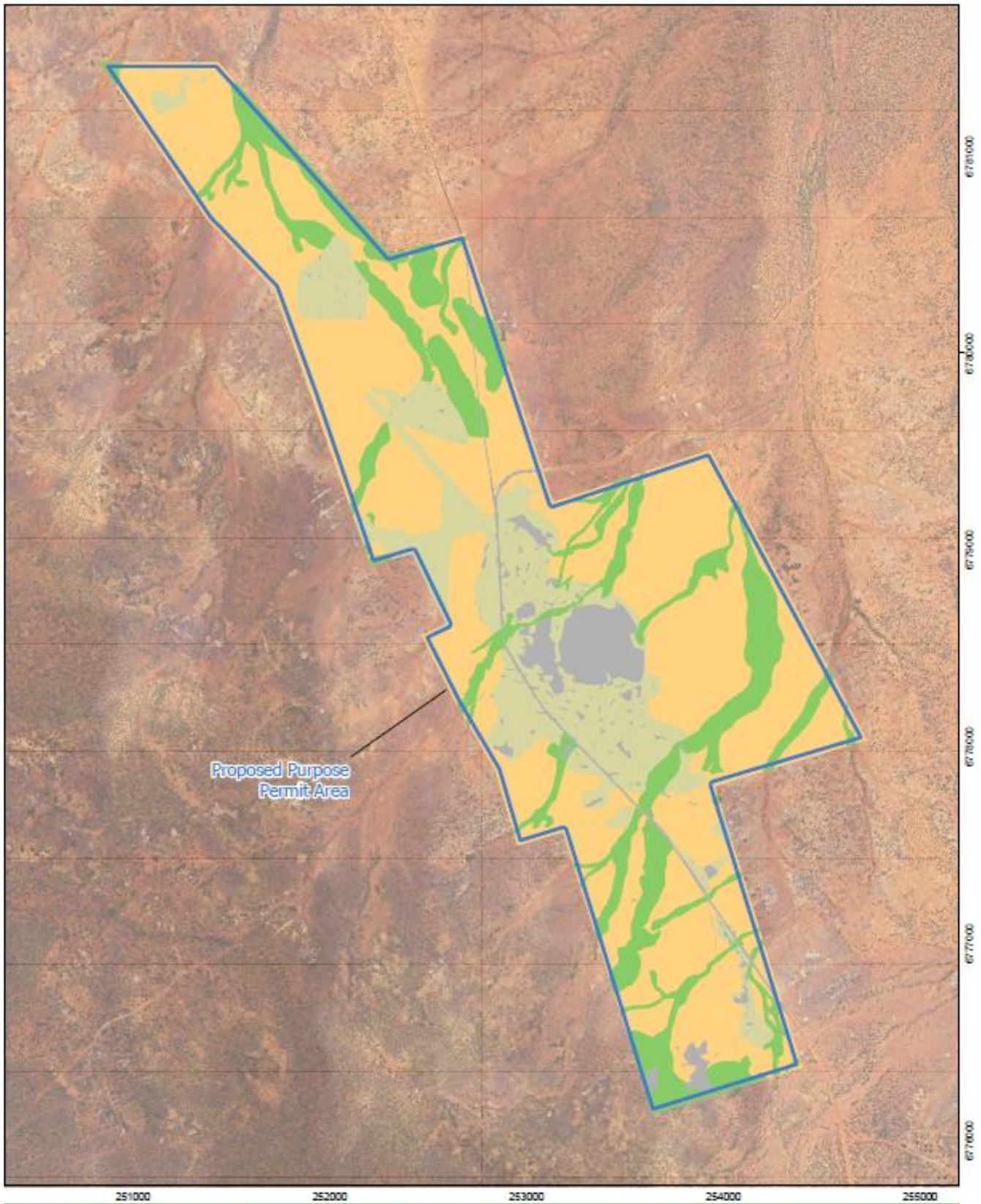
Vegetation condition is a rating given to a defined area of vegetation to categorise and rank disturbance related to human activities. The rating refers to the degree of change in the vegetation structure, density and species present in relation to undisturbed vegetation of the same type. The degree 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.

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.

Condition	Description
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.



Proposed Purpose Permit Area

Data sources
 Vegetation condition: NVS, (2023),
 Reconnaissance Flora and Vegetation Survey of
 the Mt Ida Lithium Project- January 2023,
 Unpublished Report Prepared for Red Dirt Metals
 Ltd.
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 Values Australia does not accept responsibility for any
 errors or omissions that may be present, or for any
 advice given or action taken in relation to, or as a
 consequence of the contents of this product.

Delta Lithium

Figure 5-4:
 Vegetation condition,
 Mt Ida Lithium Project

-  Proposed Purpose Permit Area
- Vegetation condition**
-  Completely Degraded
-  Degraded
-  Good
-  Good to Very Good



0 250 500
 Metres
 GDA 1994 MGA Zone 51
 Date: 5/05/2024 Rev: A
 Project: 220057
 Author: R. Houlihan;
 Drawn: S. Dunthorne
 Print © A4



Figure 1. Vegetation condition mapping.
 CPS 10121/3

E.1. GIS databases

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

- Aboriginal Heritage Places (DPLH-001)
- Clearing Regulations – Schedule One Areas (DWER-057)
- DBCA – Lands of Interest (DBCA-012)
- DBCA Legislated Lands and Waters (DBCA-011)
- Environmentally Sensitive Areas (DWER-046)
- Groundwater Salinity Statewide (DWER-026)
- Hydrographic Catchments – Catchments (DWER-028)
- Hydrography – Inland Waters – Waterlines
- Hydrography, Linear (DWER-031)
- IBRA Vegetation Statistics
- Native Title (ILUA) (LGATE-067)
- Pre-European Vegetation Statistics
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Mapping – Best Available (DPIRD-027)
- Soil Landscape Mapping – Rangelands (DPIRD-064)
- WA Now Aerial Imagery

Restricted GIS Databases used:

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

E.2. References

- Bureau of Meteorology (BoM) (2024) Bureau of Meteorology Website – Climate Data Online, Menzies Station. Bureau of Meteorology. <https://reg.bom.gov.au/climate/data/> (Accessed 17 October 2024).
- Delta Lithium Ltd (DLI) (2024) Mt Ida Lithium Project I Native Vegetation Clearing Permit Application: Supporting Document.
- Department of Environment Regulation (DER) (2014) *A guide to the assessment of applications to clear native vegetation*. Perth. https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2_assessment_native_veg.pdf
- Department of Planning, Lands and Heritage (DPLH) (2024) Aboriginal Cultural Heritage Inquiry System. Department of Planning, Lands and Heritage. <https://espatial.dplh.wa.gov.au/ACHIS/index.html?viewer=ACHIS> (Accessed 21 October 2024).
- Department of Primary Industries and Regional Development (DPIRD) (2024) NRInfo Digital Mapping. Department of Primary Industries and Regional Development. Government of Western Australia. <https://dpiird.maps.arcgis.com/apps/webappviewer/index.html?id=662e8cbf2def492381fc915aaf3c6a0f> (Accessed 17 October 2024).
- Department of Water and Environmental Regulation (DWER) (2021) Procedure: Native vegetation clearing permits. Joondalup. <https://www.wa.gov.au/system/files/2023-06/procedure-native-vegetation-clearing-permits.pdf>
- Environmental Protection Authority (EPA) (2016a) Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment. http://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/EPA%20Technical%20Guidance%20-%20Flora%20and%20Vegetation%20survey_Dec13.pdf
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4. Glossary

Acronyms:

BC Act	<i>Biodiversity Conservation Act 2016</i> , 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
DER	Department of Environment Regulation, Western Australia (now DWER)
DMIRS	Department of Mines, Industry Regulation and Safety, Western Australia (now DEMIRS)
DMP	Department of Mines and Petroleum, Western Australia (now DEMIRS)
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	<i>Environmental Protection Act 1986</i> , Western Australia
EPA	Environmental Protection Authority, Western Australia
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Federal 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	<i>Rights in Water and Irrigation Act 1914</i> , 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}:-

T Threatened species:

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:

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:

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.

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.