

Clearing Permit Decision Report

1. Application details and outcomes

1.1. Permit application details

Permit number:	11122/1
Permit type:	Purpose Permit
Applicant name:	MARBL Lithium Operations Pty Ltd
Application received:	9 June 2025
Application area:	683.8 hectares
Purpose of clearing:	Mineral production and associated activities
Method of clearing:	Mechanical Removal
Tenure:	General Purpose Leases 45/290, 45/291, 45/321; Miscellaneous Licences 45/58, 45/93, 45/105, 45/437, 45/441, 45/443; Mining Leases 45/49, 45/50, 45/254, 45/353, 45/365, 45/381, 45/382, 45/383, 45/887, 45/888, 45/923, 45/924, 45/925, 45/949, 45/950, 45/1188, 45/1252
Location (LGA area/s):	Town of Port Hedland
Colloquial name:	Wodgina Lithium project

1.2. Description of clearing activities

MARBL Lithium Operations proposes to clear up to 683.8 hectares of native vegetation within a boundary of approximately 4,841 hectares, for the purpose of mineral production. The project is located approximately 67 kilometres south of Port Hedland, within the Town of Port Hedland.

The application is to allow for the expansion of lithium mining operations at the Wodgina Lithium Project. This application covers CPS 9911/1 and CPS 10346/1 which approved the clearing of 113.8 hectares and 448.36 hectares of native vegetation respectively. This application will consolidate the clearing approved under these permits which will be surrendered following the grant of this application. The boundary of CPS 10346/1 covered an area of approximately 2,214.75 hectares. This application is to expand clearing within an approximately 2,626.25 hectare area. The additional areas included as part of this application include the expansion of mining operations in the south of the application area, activities associated with the Wodgina airstrip in the north and clearing for the Breccia borefield to the west (see figures 2 and 3).

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	17 October 2025
Decision area:	683.8 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 one submission was received.

In making this decision, the Delegated Officer had regard for the site characteristics (Appendix A), relevant datasets (Appendix D), supporting information provided by the applicant, including the results of a flora and vegetation survey, 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 Delegated Officer also took into consideration that a significant portion of the application has been previously approved under CPS 10346/1 and the purpose of this application is to expand the clearing associated with the existing permit.

The assessment identified that the proposed clearing will 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;
- impacts to conservation significant flora;

- the loss of native vegetation that is critical habitat for *Dasyurus hallucatus* (northern quoll), *Macroderma gigas* (ghost bat), and *Rhinonictis aurantia* (Pilbara leaf-nosed bat);
- the loss of vegetation which is suitable habitat for *Macrotis lagotis* (bilby) and *Dasycercus blythi* (brush-tailed mulgara); and
- impacts to riparian vegetation and watercourses.

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 will result in the following significant residual impacts (SRI):

- the loss of 33.2 hectares of critical habitat for northern quoll, Pilbara olive python, ghost bat and Pilbara leaf-nosed bat.

To address the above SRIs, the applicant will need to provide an offset proposal in accordance with the Western Australian Environmental Offsets Policy (2011) and Western Australian Environmental Offsets Guidelines (2014) which adequately counterbalances the clearing of this native vegetation.

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

- require the submission and implementation of an offset proposal;
- restrict the amount of clearing within rocky ridge and gorge habitat to 14.7 hectares;
- restrict the amount of clearing within drainage line habitat to 18.5 hectares;
- avoid, minimise and 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;
- prevent clearing of Priority flora species *Goodenia obscurata*, *Gymnanthera cunninghamii*, and *Vigna triodiophila*, or within 10 metres of these species;
- limit clearing of Priority flora species *Euphorbia clementii* to 530 individuals;
- limit clearing of Priority flora species *Euploca mutica* to 272 individuals;
- limit clearing of Priority flora species *Terminalia supranitifolia* to 96 individuals;
- limit clearing of Priority flora species *Triodia chichesterensis* to 306,305 individuals; and
- avoid clearing watercourses where practicable, and ensure surface flows are maintained or reinstated downstream.

1.5. Site map

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

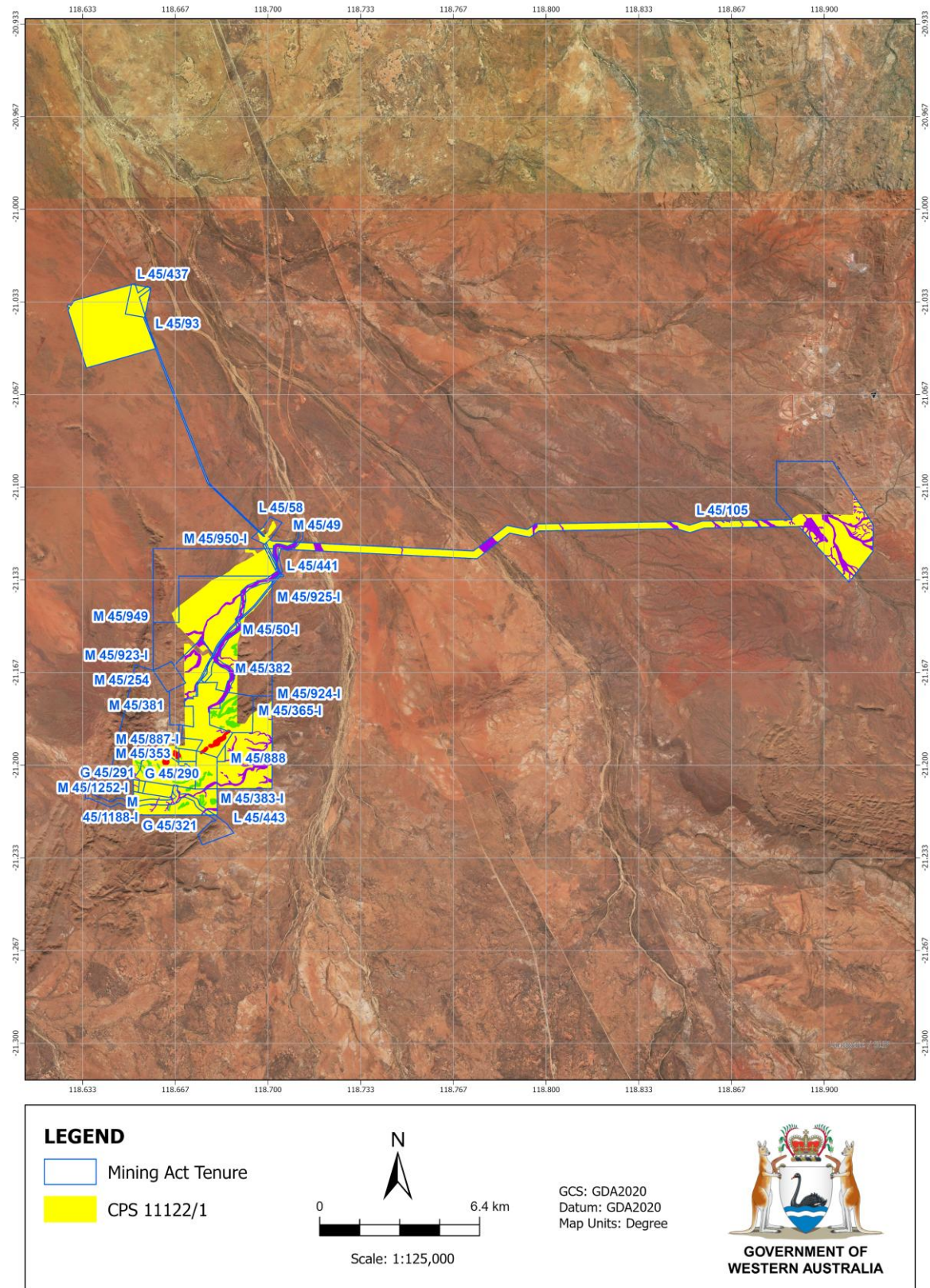


Figure 1. Map of the application area. The yellow area indicates the area within which conditional authorised clearing can occur under the granted clearing permit.

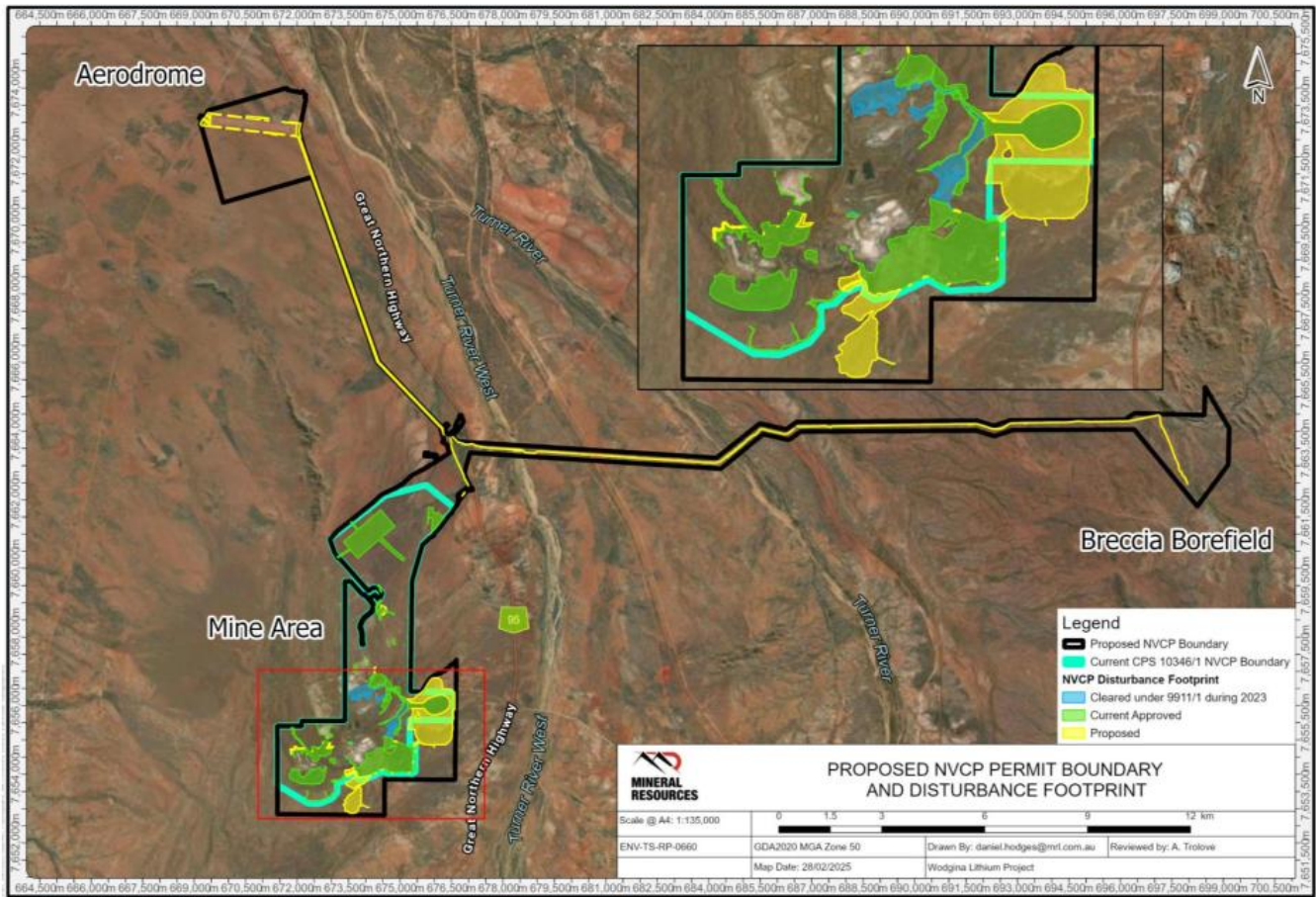


Figure 2. Map of the proposed disturbance areas within the application area.

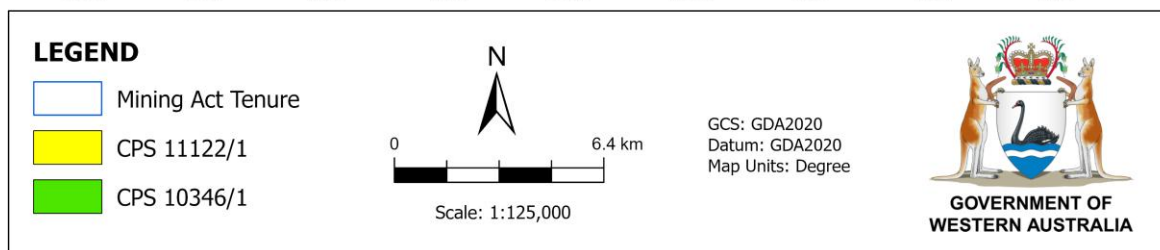
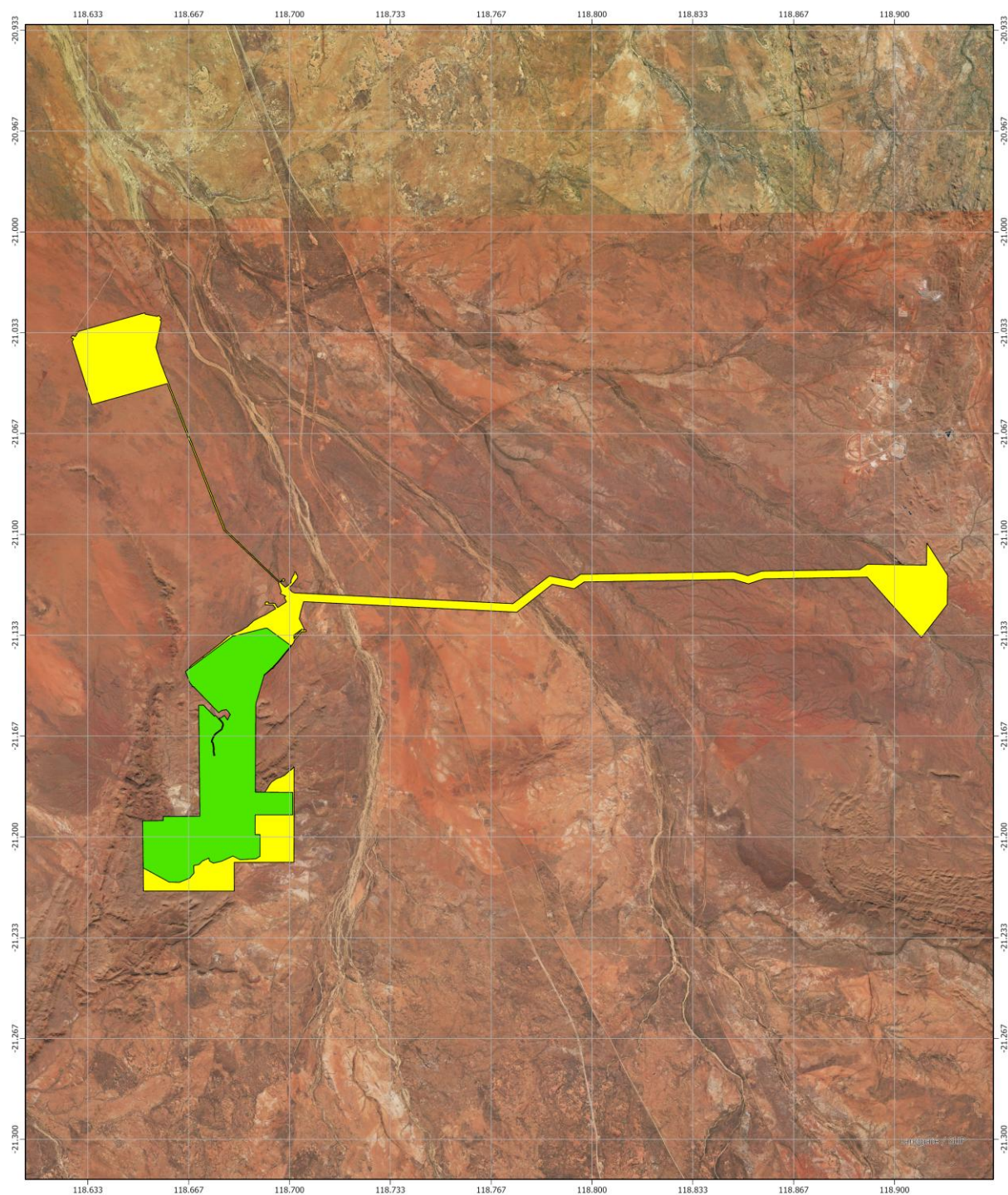


Figure 3. Map of the application in relation to CPS 10346/1.

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
- the polluter pays principle

Other legislation of relevance for this assessment include:

- *Biodiversity Conservation Act 2016* (WA) (BC 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 policies considered during the assessment include:

- *Environmental Offsets Policy* (2011)

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)
- Environmental Offsets Guidelines (EPA, August 2014)
- Technical guidance – *Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA, 2016b)
- Technical guidance – *Terrestrial Fauna Surveys for Environmental Impact Assessment* (EPA, 2020)

3. Detailed assessment of application

3.1. Avoidance and mitigation measures

MARBL Lithium has a number of proposed measures to avoid and mitigate impacts from the proposed clearing. Such measures include:

- Minimising clearing to the extent of disturbance required;
- Implementing a land activity permit process to ensure that only approved areas are cleared and all clearing is undertaken in accordance with relevant approvals;
- Areas to be cleared are demarcated prior to clearing;
- Some heavy machinery are fitted with in-cab GPS which have alarm functions to prevent clearing outside of permitted areas. For machinery without this function, spotters will be used where safe to do so;
- Existing cleared areas will be utilised in the first instance for proposed activities;
- Manage existing surface water flows where possible; and
- Undertake progressive rehabilitation.

Measures which will be implemented specifically in relation to fauna:

- A 200 metre buffer will be maintained around potential ghost bat maternity roosts and a 100 metre buffer around ghost bat diurnal roosts;
- An exclusion area of 'rocky ridge and gorge' near significant caves will be implemented;
- Clearing of the significant 'rocky ridge and gorge' and 'drainage line' fauna habitats will be limited to 14.7 hectares and 18.5 hectares respectively;
- Machinery and vehicle movements that must be undertaken between dusk and dawn should be limited to low speeds on access tracks;
- Excavations and trenches will be kept open only as long as needed to undertake the work and egress points will be provided dependant on depth / morphology of the excavation. Open trenches will be inspected twice-daily for trapped fauna; and
- Feral species management will be undertaken where required.

After consideration of avoidance and mitigation measures, it was determined that an offset to counterbalance the significant residual impacts to threatened fauna was necessary. In accordance with the Government of Western Australia's Environmental Offsets Policy and Environmental Offsets Guidelines, these significant residual impacts have been addressed through the conditioning of environmental offset requirements on the permit.

3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (Appendix A) and 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 flora), and water resources. The consideration of these impacts, and the extent to which they can be managed through conditions applied in line with sections 51H and 51I of the EP Act, is set out below.

3.2.1. Biological values (flora) - Clearing Principle (a)

Assessment

Numerous flora surveys have been conducted over the greater Wodgina area since 2000 (Umwelt, 2025). There have been 10 conservation significant flora species recorded within the greater flora survey area;

- *Abutilon* aff. *hannii* (potentially undescribed species)
- *Euphorbia clementii* (priority 3)
- *Euploca mutica* (priority 3)
- *Goodenia obscurata* (priority 3)
- *Gymnanthera cunninghamii* (Priority 3)
- *Ptilotus mollis* (priority 4)
- *Triodia basitricha* (Priority 3)
- *Triodia chichesterensis* (priority 3)
- *Terminalia supranitifolia* (priority 3)
- *Vigna triodiophila* (priority 3)

Within the application area, *Abutilon* aff. *hannii*, *Euphorbia clementii*, *Euploca mutica*, *Goodenia obscurata*, *Gymnanthera cunninghamii*, *Triodia chichesterensis*, *Terminalia supranitifolia* and *Vigna triodiophila* have all been recorded during targeted flora surveys (Mineral Resources, 2025). Whilst there is potential habitat within the application area, the other species which have been previously recorded in the local area were considered unlikely to be present within the application area given they have not been recorded during the intensive sampling undertaken within the application area (Umwelt, 2022; 2025). Suitable habitat is also present for the species *Gomphrena leptophylla* (priority 3) however, they were also considered unlikely to be present given they have never been recorded from any of the flora surveys in the greater Wodgina area (Umwelt, 2022; 2025).

There has been 2,903 individuals of *Terminalia supranitifolia* recorded from 1,542 locations in the greater Wodgina study area (Mineral Resources, 2025). This species is currently known from 10 broad locations within the Pilbara with the application area near the eastern extent of the species known distribution (DBCA, 2024). Given its location at the edge of the known extent, it may be genetically different from more western localities (DBCA, 2024). Within the application area there are 443 individuals from 275 locations (Mineral Resources, 2025). This represents approximately 15% of the individuals recorded in the local area. The proposed disturbance footprint will impact on 96 individuals (Mineral Resources, 2025). Historically there has been 179 individuals cleared so the cumulative impact will increase to 275 individuals (approximately 9.47% of the local population). Based on records close to the proposed disturbance footprint, there may also be indirect impacts to additional plants from sources such as dust and sediment run-off. Due to the new records of this species identified in the local area during the most recent flora survey, the cumulative impact on this species has been reduced from the amount identified for CPS 10346/1. There are significant areas of suitable habitat present outside of the application area with the total areas of suitable habitat in the Wodgina area mapped over 3,000 hectares (Umwelt, 2025). There is 594.7 hectares of habitat mapped within the application area with the proposed disturbance footprint impacting on 155.2 hectares of habitat (Mineral Resources, 2025). Impacts to this species should be minimised where possible as any additional clearing of individuals has the potential to be regionally significant.

Triodia chichesterensis is a common species in the Wodgina area with an estimated 2,622,729 individuals recorded from 2,832 locations (Mineral Resources, 2025). The most recent survey identified over 670,000 additional records of this species (Umwelt, 2025). Within the application area there are 1,245,294 individuals from 1,533 locations which represents 47% of the individuals recorded in the local area (Mineral Resources, 2024). The proposed disturbance footprint for project will clear 306,305 individuals which is approximately 11.7% of the total recorded in the Wodgina area. There has been approximately 7,591.2 hectares of preferred habitat mapped for this species over the larger Wodgina survey area (Mineral Resources, 2023). Within the application area there is 2,281.3 hectares of this preferred habitat with the proposed disturbance footprint impacting on 416.8 hectares (Mineral Resources, 2025). Whilst this species is common in the local area, continued increases to cumulative impacts may start to be significant to this subpopulation. Where possible impacts to this species should be avoided.

Euphorbia clementii has been recorded at 704 locations in the greater Wodgina area with a total of 63,989 counted (Umwelt, 2025). Within the application area there are 2,309 individuals of this species recorded at 245 locations (Mineral Resources, 2025). The disturbance footprint for the previous permits (CPS 9911/1 and CPS 10346/1) were designed so it will not clear any locations of this species. The proposed clearing for this application will impact on 530 individuals from 40 locations (Mineral Resources, 2025). There was 1,603.5 hectares of preferred habitat mapped within the application area and 3,989.6 hectares in the greater Wodgina area. The proposed clearing will clear 181.7 hectares of this habitat. Given the amount of individuals and suitable habitat present in the local area, the proposed clearing of 530 individuals is not likely to significantly impact this species at a local or regional level.

Euploca mutica has not been recorded within any of the previous clearing permit areas. This species was recorded in the north of the application area primarily in the area surrounding the aerodrome (Mineral Resources, 2025). This species is typically only in recently burnt areas and is apparently short lived (Umwelt, 2025). There are 77 herbarium records of this species over a 150 kilometre range (Western Australian Herbarium, 1998-). This species is typically occurs on coarse sandy plains and flats and there was 2,604.9 hectares of habitat mapped in the greater Wodgina area (Mineral Resources, 2025; Umwelt, 2025). Within the application area there is 1,373.6 hectares of preferred habitat with the proposed activities clearing 142.5 hectares of habitat. Given that suitable habitat is well represented in the local area, and this species habit of appearing following fire, the proposed clearing of 272 individuals is not likely to significantly impact this species at a local or regional level.

Vigna triodiophila was recorded at 169 locations within the greater Wodgina area, with 2,482 individuals recorded (Mineral Resources, 2025). There have been 493 individuals recorded in the application area (Mineral Resources, 2025). There is approximately 594.7 hectares of habitat mapped within the application area, of which 155.2 hectares is within the proposed disturbance footprint (Mineral Resources, 2025). There have been 2,751 individuals recorded from 235 locations within the greater Wodgina survey area (Mineral Resources, 2025). The proposed clearing will not impact on any individuals of this species (Mineral Resources, 2025).

There are three recorded locations of *Goodenia obscurata* within the greater Wodgina area (DBCA, 2024). This species was only recently described in 2023 and therefore was not searched for during any of the flora surveys undertaken prior to 2024 (Mineral Resources, 2024). None of the known locations are within the application area. This species is a short lived perennial known from 24 herbarium species scattered across the Carnarvon and Pilbara bioregions (DBCA, 2024). This species occurs on floodplains or low rocky ridges, growing in red-brown sandy clay or lateritic loam over banded ironstone (Western Australian Herbarium, 1998-). Suitable habitat for this species is common in the local area with over 1,000 hectares mapped in the local area (Mineral Resources, 2025). This species frequently appears post fire in disturbed habitats so may be in greater abundance in the first growing season following fire (Umwelt, 2025).

The proposed clearing will increase the fragmentation of the known extent of the subpopulation for *Terminalia supranitifolia* and *Triodia chichesterensis* by separating existing subpopulations (Umwelt, 2025). Cumulative impacts to these species are increasing and may begin to be significant if further increases occur. The impact to *Triodia chichesterensis* is not likely to be significant due to the close proximity of the remaining subpopulations and the likely further extent of populations within the application area (Umwelt, 2025). A subpopulation of *Terminalia supranitifolia* will be created by the proposed clearing however, it is not likely to impact the long term reproductive viability of this population given the known locations to north and south outside of the application area (Umwelt, 2025).

Conclusion

Based on the above assessment, the proposed clearing will result in local impacts to priority flora species. The proposed clearing will further increase fragmentation of the populations however, these species are well represented locally outside of the application area. Provided that the numbers of individuals and habitat impacted is restricted to the amounts identified, the proposed clearing is not expected to have a significant impact on the long term viability of the local populations.

Conditions

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

- prevent clearing of Priority flora species *Goodenia obscurata*, *Gymnanthera cunninghamii*, and *Vigna triodiophila*, or within 10 metres of these species;
- limit clearing of Priority flora species *Euphorbia clementii* to 530 individuals;
- limit clearing of Priority flora species *Euploca mutica* to 272 individuals;
- limit clearing of Priority flora species *Terminalia supranitifolia* to 96 individuals;
- limit clearing of Priority flora species *Triodia chichesterensis* to 306,305 individuals.

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

There have been several fauna surveys undertaken over the greater Wodgina area which include the application area. There have been seven broad fauna habitats mapped within the application area (Mineral Resources, 2023):

- Ironstone ridgetop;
- Rocky ridge and gorge;
- Rocky foothills;
- Stony rise;
- Spinifex sandplain;
- Spinifex stony plain; and
- Drainage line.

There is also a proportion of the application area which has been mapped as previously cleared (approximately 9%). Of the area covered by fauna habitats, the majority of the greater survey area (over 60%) is mapped as rocky foothills and spinifex stony plain (Mineral Resources, 2025). Most of the habitats are widespread throughout the bioregion however, the ironstone ridgetop and rocky ridge and gorge habitats are less common and restricted. The rocky ridge and gorge habitat is considered to be a significant habitat due to its limited extent and potential to support threatened fauna species (Umwelt, 2022). The drainage line habitat is also considered to have elevated significance because of its ability to support diverse faunal assemblages and act as corridors for movement (Umwelt, 2022). Given the range of habitats present, the fauna assemblage of the greater Wodgina survey area has a diverse faunal assemblage (Umwelt, 2022).

The following conservation significant fauna species (state listing shown below) have been identified as potentially occurring within the application area:

- Black-striped Ctenotus (*Ctenotus nigrilineatus*) (Priority 1)
- Brush-tailed Mulgara (*Dasycercus blythi*) (Priority 4)
- Common Sandpiper (*Tringa hypoleucos*) (Migratory)
- Fork-tailed Swift (*Apus pacificus*) (Migratory)
- Gane's Blind Snake (*Anilius ganei*) (Priority 1)
- Ghost Bat (*Macroderma gigas*) (Vulnerable)
- Greater Bilby (*Macrotis lagotis*) (Vulnerable)
- Grey Falcon (*Falco hypoleucos*) (Vulnerable)
- Lakeland Downs Mouse (*Leggadina lakedownensis*) (Priority 4)
- Long-tailed Dunnart (*Sminthopsis longicaudata*) (Priority 4)

- Northern Quoll (*Dasyurus hallucatus*) (Endangered)
- Oriental Plover (*Charadrius veredus*) (Migratory)
- Peregrine Falcon (*Falco peregrinus*) (Other specially protected fauna)
- Pilbara Leaf-nosed Bat (*Rhinonictis aurata*) (Vulnerable)
- Pilbara Olive Python (*Liasis olivaceous barroni*) (Vulnerable)
- Spectacled Hare-wallaby (mainland) (*Lagorchestes conspicillatus leichardti*) (Priority 4)
- Western Pebble-mound Mouse (*Pseudomys chapmani*) (Priority 4)
- Wood Sandpiper (*Tringa glareola*) (Migratory)

The Northern Quoll has been regularly recorded within the application area (Phoenix Environmental Services, 2024). The population at Wodgina is likely to be a high density breeding population with the annual population fluctuating based on rainfall, food availability, and fire (Phoenix Environmental Services, 2024; Umwelt, 2022). The population is likely to extend throughout the rocky range surrounding the application area. The rocky ridge and gorge habitat has been identified as critical habitat for this species due to its importance for shelter and breeding (Phoenix Environmental Services, 2024). Reducing the amount of this habitat is likely to result in a long-term decrease in the carrying capacity of the local population (Umwelt, 2022). There was 96 hectares of this habitat mapped within the application area, of which 14.7 hectares is proposed to be cleared as part of the project. There have been 729.8 hectares of this habitat mapped in the greater Wodgina survey area (Mineral Resources, 2025). Including the proposed clearing of 14.7 hectares, the cumulative impact of all clearing at Wodgina since 2009 will be 63.4 hectares which is approximately 8.7% of the habitat (Mineral Resources, 2025). All habitat within one kilometre of the rocky ridge and gorge habitat was considered to be foraging and dispersal habitat (Hill & Ward, 2010; Phoenix Environmental Services, 2024). Therefore, a significant portion of the vegetation within the proposed disturbance footprint is considered either breeding habitat or foraging and dispersal habitat for the Northern Quoll. There are areas of rocky ridge and gorge habitat that are not proposed to be cleared which contain known caves that will be retained and may still be used as potential breeding sites. The retention of just these caves have the potential to limit dispersal throughout the landscape and create islands of habitats which can increase the cumulative impact on the short to medium term (DBCA, 2024). Clearing of watercourses which are utilised as dispersal paths has been minimised and areas other than mining voids will be rehabilitated following mining to allow for future use by fauna species (Mineral Resources, 2025).

The Pilbara leaf-nosed bat has been recorded within the permit area (Phoenix Environmental Services, 2024). There have been six nocturnal refuges recorded within the permit area (Mineral Resources, 2025). Nocturnal refuges are considered to be important for the persistence of the local population, however, are not considered to be habitat critical to the survival of the species (Threatened Species Scientific Committee, 2016). There is also an identified transitional diurnal roost located at Wodgina, however, this is not within the clearing permit boundary (Mineral Resources, 2025). All of the nocturnal refuges within the permit area are outside of the proposed disturbance footprint and all are within an exclusion zone proposed by the applicant and will not be impacted by the proposed clearing (Mineral Resources, 2025). There is one nocturnal refuge located adjacent to a previously active tailings storage facility (TSF). Rehabilitation works to cap the TSF may need to be undertaken within close proximity of the refuge. Works will be undertaken during daylight to minimise any potential disturbance to any bats which may be utilising the cave (Mineral Resources, 2025). Foraging habitat is also likely to be present, with the drainage line and rocky ridge and gorge habitats the most significant for foraging (Phoenix Environmental Services, 2024; Umwelt, 2022).

There are records of Ghost Bats across the greater Wodgina area, and the species are likely to utilise a number of caves in the area (Phoenix Environmental Services, 2024). There are a number of caves with previous Ghost Bat records, including several diurnal roosts and diurnal roosts that are potential maternity roosts (Phoenix Environmental Services, 2025; Umwelt, 2022). Within the permit area there are two known diurnal roosts, two potential maternity roosts and 12 nocturnal refuges (Mineral Resources, 2025). Diurnal roosts are critical habitat for the long term survival of Ghost Bats and a 100 metre exclusion area surrounding these caves has been proposed by MARBL Lithium Operations Pty Ltd (Mineral Resources, 2025) based on it being an isolated roost assessed as critical (Bat Call WA, 2021). A 200 metre buffer is proposed around the potential maternity roost to ensure that it is not impacted by the proposed clearing. It is likely that several of the nocturnal refuges will be impacted by the proposed clearing. There are numerous other nocturnal roosts which have been identified within similar habitat in the greater Wodgina area (Umwelt, 2022). Whilst they are used by the Ghost Bats whilst foraging, they are not considered critical for the species (Bat Call WA, 2021). Similar to the Pilbara Leaf-nosed Bat, the drainage line and rocky ridge and gorge habitats are likely to be significant as foraging habitat given the potential presence of water and higher densities of prey. There will no additional disturbance to Ghost Bat caves above the disturbance already proposed under CPS 10346/1.

The Pilbara Olive Python has been previously recorded within the permit area and there is also a recent record from the Wodgina mine village (Phoenix Environmental Services, 2025). It is known to occur in other rocky ranges in the region and is considered likely to occur within habitat in the permit area (Phoenix Environmental Services, 2025). This species is strongly associated with rocky habitats, particularly areas with permanent or semi-permanent water. The rocky ridge and gorge habitat is considered to be critical habitat for this species with the drainage line habitat also considered to be important for dispersal and foraging (Phoenix Environmental Services, 2025; Umwelt, 2022). Excluding the mine pit at the Breccia borefield, there are no natural semi-permanent or permanent water sources within the permit area.

The rocky ridge and gorge, and drainage line habitats are significant for the above four species. The proposed clearing has been reduced where possible to minimise impacts on these significant habitats. The proposed activities will result in the removal of 14.7 hectares of the rocky ridge and gorge habitat and 18.5 hectares of drainage line habitat (Mineral Resources, 2025). This is a reduction in the amount of rocky ridge and gorge habitat originally proposed to be cleared under CPS 10346/1. Habitat mapping was undertaken as part of the detailed survey undertaken by Phoenix Environmental Services (2024) in October 2023. This mapping has been used in determining cumulative impacts of the clearing. Therefore, the reduction in amount of rocky ridge and gorge habitat being cleared is a result of more accurate mapping of the habitat rather than any avoidance of clearing. Based on the latest habitat mapping there is an increase in 1.1 hectares of rocky ridge and gorge habitat and 14.4 hectares of drainage line habitat (taking into account areas already cleared) above the proposed clearing for CPS 10346/1 (Mineral Resources, 2025). An

exclusion zone consisting of rocky ridge and gorge habitat outside of the proposed disturbance envelope and 100 metres around the Ghost Bat diurnal roosts has been proposed by the applicant. A 200 metre buffer around the potential maternity roosts has also been implemented. These habitats are also represented outside the permit area with over 700 hectares of both these habitats mapped in the greater Wodgina area (Mineral Resources, 2025).

The bilby was recorded within the application area from the identification of two scats (Phoenix Environmental, 2024). These records were located in an area of spinifex sandplain habitat in close proximity to the Turner River (Phoenix Environmental Services, 2024). The bilby has been previously recorded throughout spinifex sandplain around the Wodgina airstrip (Phoenix Environmental Services, 2024). Survey evidence suggests that this species likely to utilise the spinifex sandplain and drainage line habitats within the application area and is sparsely distributed in low numbers or intermittently present (Phoenix Environmental Services, 2024). Similar habitat is widespread in the local area and it is likely to utilise the application area as part of a larger home range.

The brush-tailed mulgara has also been previously recorded in the spinifex sandplain habitat around the Wodgina airstrip (Phoenix Environmental, 2024). It was not recorded during the most recent survey of the application area however, it is likely to utilise the spinifex sandplain habitat which is present. Whilst suitable habitat for the bilby and mulgara is common in the local area, clearing has the potential to impact on individuals of this species.

The Gane's Blind Snake has not been recorded in the local area however, it is also likely to utilise the rocky ridge and gorge habitat if present, so any reduction of impact on this habitat will also benefit this species. The other conservation significant species potentially within the permit area are either vagrant species which would only occasionally utilise the permit area or found within the more common habitats which are well represented outside of the permit area.

Conclusion

Based on the above assessment, the proposed clearing will impact on habitat which is significant for local fauna species. Efforts have been made to reduce the amount of habitat that will be removed; however, the loss of critical habitat will likely have a permanent impact on the local populations of northern quoll, ghost bat, Pilbara leaf-nosed bat and Pilbara olive python. The proposed clearing also has the potential to impact individuals of bilby and brush-tailed mulgara.

Conditions

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

- avoid clearing areas of habitat identified within an exclusion area;
- restrict the amount of clearing within rocky ridge and gorge habitat to 14.7 hectares;
- restrict the amount of clearing within drainage line habitat to 18.5 hectares; and
- undertake slow, progressive one-directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity.
- provide an offset proposal to counterbalance the loss of 33.2 hectares of critical habitat for northern quoll, Pilbara olive python, ghost bat and Pilbara leaf-nosed bat.

3.2.3. Biological values (riparian vegetation) - Clearing Principle (f)

The application area intersects several ephemeral watercourses (GIS Database). Several watercourses have already been impacted to an extent by the existing mining activities. There were five vegetation types mapped within the permit area which contain riparian vegetation (VT5, VT6, VT8, VT10, VT11). There is 509.3 hectares of these vegetation types mapped within the area.

The most significant watercourses which intersect the application area is the Turner River and Turner River West (GIS Database). There is 1.7 hectares of proposed disturbance of vegetation associated with these watercourses for the purpose of duplicating an existing raw water pipeline (Mineral Resources, 2025). The proposed clearing will be located directly adjacent to existing disturbance to minimise impacts on these watercourses. Some of these areas of proposed clearing have also been cleared previously and the vegetation present is regrowth vegetation (Mineral Resources, 2025).

Riparian vegetation within the application area is significant for foraging and dispersal for fauna species in the local area. It is also habitat which supports conservation significant flora. The clearing of drainage line habitat under CPS 10346/1 was restricted to 8.04 hectares. For the current application, it is proposed that clearing of this habitat will not be greater than 18.5 hectares (Mineral Resources, 2025). Additional proposed minimisation measures include designing waste landforms to be internally draining to minimise runoff, the construction of drainage controls including sediment basins to prevent runoff entering waterways and monitoring of surface and groundwater quality to identify any changes in water quality (Mineral Resource, 2025).

Conclusion

Based on the above assessment, the proposed clearing will impact on vegetation growing in association with watercourses, the most significant being associated with the Turner River. Clearing of riparian vegetation has been minimised where possible and the proposed clearing is not expected to have a significant impact on the function of significant watercourses in the local area.

Conditions

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

- restrict the amount of clearing within drainage line habitat to 18.5 hectares;

- avoid clearing riparian vegetation where possible and ensure that following any clearing there is the maintenance of existing water flows.

3.3. Relevant planning instruments and other matters

The clearing permit application was advertised on 24 June 2025 by the Department of Mines, Petroleum and Exploration inviting submissions from the public. There were two submissions received in relation to this application.

There are two native title claims over the area under application (DPLH, 2025). These claims have been determined by the Federal Court on behalf of the claimant groups. 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 four registered Aboriginal Sites of Significance within the application area (DPLH, 2025). 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 the Northern Quoll, Pilbara Olive Python, Ghost Bat, Pilbara Leaf-nosed Bat, Bilby, which are a protected matter 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 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.

4. Suitability of offsets

Through the detailed assessment outlined in Section 3.2 above, the Delegated Officer has determined that the following significant residual impacts remain after the application of the avoidance and mitigation measures summarised in Section 3.1:

- the loss of 33.2 hectares of critical habitat for northern quoll, Pilbara olive python, ghost bat and Pilbara leaf-nosed bat.

The applicant is required to provide an offset proposal in accordance with the Western Australian Environmental Offsets Policy (2011) and Western Australian Environmental Offsets Guidelines (2014) which adequately counterbalances the clearing of this native vegetation. The offset proposal must be provided to the CEO by 1 December 2025.

End

Appendix A. Site characteristics

A.1. Site characteristics

Characteristic	Details
Local context	<p>The project is located approximately 67 kilometres south of Port Hedland (GIS Database). Part of the application area has been previously disturbed from mining activities.</p> <p>The area proposed to be cleared is part of an expansive tract of native vegetation in the extensive land use zone of Western Australia. The application area includes existing disturbance from the existing Wodgina mine. The areas surrounding the application area consists of intact vegetation (GIS Database).</p>
Ecological linkage	According to available databases, the application area does not contain any known or mapped ecological linkages (GIS Database).
Conservation areas	The nearest conservation area is the Mungaroona Range Nature Reserve which is located approximately 50 kilometres southwest 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>82: Hummock grasslands, low tree steppe; snappy gum over <i>Triodia wiseana</i>; 93: Hummock grasslands, shrub steppe; kanji over soft spinifex; and 619: Medium woodland; river gum (<i>Eucalyptus camaldulensis</i>) 626: Hummock grasslands, shrub-steppe, kanji over soft spinifex and <i>Triodia brizoides</i> (GIS Database).</p> <p>Several flora and vegetation surveys have been conducted over the application area from 2018 to 2024 (Mineral Resources, 2025). The following vegetation associations were recorded within the application area (Mineral Resources, 2025):</p> <p>1: Mid sparse to open shrubland dominated by <i>Acacia ancistrocarpa</i> over low sparse shrubland dominated by <i>Bonamia erecta</i>, <i>Ptilotus astrolasius</i> and <i>Ptilotus calostachyus</i> over mid hummock grassland of <i>Triodia lanigera</i> on red-brown sandy loam or sandy clay, often with quartz or ironstone stones, on plains.</p> <p>2: Tall open to sparse shrubland dominated by <i>Acacia orthocarpa</i>, <i>Acacia ancistrocarpa</i> and <i>Acacia acradenia</i> over low sparse shrubland of mixed species including <i>Goodenia stobbsiana</i> and <i>Ptilotus astrolasius</i> over low hummock grassland dominated by <i>Triodia lanigera</i> and occasionally <i>Triodia epactia</i> on red-brown clay loam with granite, quartz or ironstone stones on colluvial stone plains and low flat-topped rises.</p> <p>3: Tall to mid sparse shrubland of mixed species dominated by <i>Acacia acradenia</i>, <i>Acacia inaequilatera</i> and <i>Grevillea wickhamii</i> subsp. <i>hispidula</i> over low sparse shrubland of mixed species including <i>Indigofera monophylla</i> and <i>Goodenia stobbsiana</i> over low hummock grassland dominated by <i>Triodia epactia</i> and/or <i>Triodia brizoides</i> on red, brown or red-brown clay loam with metamorphic, ironstone, quartz and occasionally granite stones, occasionally with metamorphosed granite or granite outcropping, on lower slopes and colluvial outwashes of ranges and occasionally on low flat-topped rises.</p> <p>4: Tall to mid sparse shrubland dominated by <i>Acacia acradenia</i> and <i>Acacia ancistrocarpa</i> over low sparse shrubland dominated by <i>Acacia ptychophylla</i> and/or <i>Acacia stellaticeps</i> over low hummock grassland dominated by <i>Triodia lanigera</i> and <i>Triodia wiseana</i>, often with <i>Triodia epactia</i> on red-brown clayloam stony undulating plains and outwashes of ranges.</p> <p>5: Low isolated trees of <i>Corymbia hamersleyana</i> over tall open to sparse shrubland dominated by <i>Acacia tumida</i> var. <i>pilbarensis</i>, <i>Acacia ancistrocarpa</i> and <i>Acacia acradenia</i> over low open to sparse shrubland of mixed species including <i>Bonamia erecta</i>, <i>Corchorus parviflorus</i> and <i>Indigofera monophylla</i> over low hummock and tussock grassland dominated by <i>Chrysopogon fallax</i>, <i>Triodia epactia</i> and occasionally <i>Triodia lanigera</i> on red, brown or red-brown sandy or clay loam with colluvial stones in minor drainage features including flats and small creeks.</p> <p>6: Low isolated trees of <i>Corymbia hamersleyana</i> over tall sparse to open shrubland of <i>Acacia tumida</i> var. <i>pilbarensis</i>, <i>Acacia acradenia</i>, <i>Grevillea wickhamii</i> subsp. <i>hispidula</i> and <i>Acacia pyrifolia</i> var. <i>pyrifolia</i> over low sparse shrubland of mixed species including <i>Tephrosia rosea</i> var. <i>clementii</i>, <i>Indigofera monophylla</i> and <i>Corchorus lasiocarpus</i> subsp. <i>lasiocarpus</i> over mid sparse</p>

Characteristic	Details
	<p>to open hummock grassland of <i>Triodia epactia</i> on brown or red-brown sandy loam or clay loam on stony drainage lines and flood plains.</p> <p>7: Tall to mid open to sparse shrubland dominated by <i>Acacia ancistrocarpa</i> and occasionally <i>Acacia tumida</i> var. <i>pilbarensis</i>, <i>Acacia inaequilatera</i> and <i>Grevillea wickhamii</i> subsp. <i>hispidula</i> over low sparse shrubland of mixed species including by <i>Bonamia erecta</i>, <i>Indigofera monophylla</i> and <i>Ptilotus astrolasius</i> over low hummock grassland dominated by <i>Triodia lanigera</i> and occasionally <i>Triodia schinzii</i> and/or <i>Triodia epactia</i> on red, brown or red-brown sandy or clay loam, often with quartz or ironstone stones, on plains.</p> <p>8: Low isolated trees of <i>Corymbia hamersleyana</i> over tall isolated shrubs to sparse shrubland of mixed species including <i>Acacia inaequilatera</i>, <i>Grevillea wickhamii</i> subsp. <i>hispidula</i> and <i>Acacia trachycarpa</i> low sparse to open shrubland of <i>Acacia stellaticeps</i> over low open hummock grassland to hummock grassland dominated by <i>Triodia epactia</i> and occasionally <i>Triodia lanigera</i> on red-brown or orange sandy clay loam on minor drainage lines, drainage line edges and floodplains.</p> <p>9: Isolated low trees dominated by <i>Corymbia hamersleyana</i> over tall to mid sparse shrubland dominated by <i>Acacia orthocarpa</i>, <i>Grevillea wickhamii</i> subsp. <i>hispidula</i> and often <i>Acacia maitlandii</i> and <i>Acacia tumida</i> var. <i>pilbarensis</i> over low sparse shrubland of mixed species including <i>Corchorus parviflorus</i>, <i>Dampiera candidans</i>, <i>Goodenia stobbsiana</i>, <i>Indigofera monophylla</i> and <i>Scaevola browniana</i> subsp. <i>browniana</i> over low hummock grassland dominated by <i>Triodia epactia</i> and occasionally <i>Triodia brizoides</i> or <i>Triodia lanigera</i> on orange, brown or red-brown sandy or clay loam with granite and quartz stones over granite outcropping on undulating plains or low rises.</p> <p>10: Low open woodland to isolated trees dominated by <i>Eucalyptus victrix</i> and/or <i>Corymbia hamersleyana</i> over tall open to sparse shrubland of mixed species dominated by <i>Acacia pyrifolia</i> var. <i>pyrifolia</i>, <i>Acacia tumida</i> var. <i>pilbarensis</i> and <i>Melaleuca linophylla</i> over mid to low open to sparse shrubland of mixed species including <i>Cajanus pubescens</i>, <i>Indigofera monophylla</i>, <i>Tephrosia rosea</i> var. <i>clementii</i>, <i>Corchorus parviflorus</i> and <i>Jasminum didymum</i> subsp. <i>lineare</i> over low tussock and hummock grassland to open tussock and hummock grassland of mixed species dominated by <i>Triodia epactia</i>, <i>Cenchrus ciliaris</i>, <i>Chrysopogon fallax</i>, <i>Cymbopogon ambiguus</i> and <i>Eriachne tenuiculmis</i> on red or brown clay or sandy loam, usually with colluvial stones, in major creeks.</p> <p>11: Mid to low open woodland of <i>Eucalyptus camaldulensis</i> subsp. <i>refulgens</i> and <i>Melaleuca argentea</i> over tall open shrubland of <i>Melaleuca glomerata</i>, <i>Melaleuca linophylla</i>, <i>Acacia trachycarpa</i> and <i>Acacia ampliceps</i> over mid to low open to sparse shrubland, forland and sedgeland of mixed species including <i>Crotalaria cunninghamii</i>, <i>Cyperus ixiocarpus</i>, <i>Afrohybanthus aurantiacus</i> and <i>Nelica maderaspatensis</i> over low sparse hummock grassland of <i>Triodia epactia</i> with low tussock grassland of <i>Cenchrus ciliaris</i> on orange / light brown sand with colluvial stones in major drainage channels in the Turner River.</p> <p>12: Low isolated trees of <i>Eucalyptus leucophloia</i> subsp. <i>leucophloia</i> and/or <i>Corymbia hamersleyana</i> over mid sparse shrubland to isolated shrubs dominated by <i>Acacia acradenia</i>, <i>Acacia inaequilatera</i> and <i>Grevillea wickhamii</i> subsp. <i>hispidula</i> over low sparse shrubland of mixed species including <i>Corchorus parviflorus</i>, <i>Indigofera monophylla</i> and <i>Tribulus suberosus</i> over low hummock grassland dominated by <i>Triodia wiseana</i>, <i>Triodia epactia</i> and occasionally <i>Triodia brizoides</i> on red, brown or redbrown clay loam with ironstone, metamorphosed granite or occasionally dolerite or quartz stones over ironstone or metamorphosed granite outcropping on cliffs, ridges and crests and upper to mid slopes of ranges.</p> <p>13: Low open woodland to isolated trees of <i>Corymbia hamersleyana</i> over tall to mid sparse shrubland dominated by <i>Acacia inaequilatera</i>, <i>Acacia bivenosa</i> and <i>Acacia acradenia</i> over low hummock grassland dominated by <i>Triodia chichesterensis</i> and/or <i>Triodia wiseana</i> and occasionally <i>Triodia angusta</i> on red, red-brown or light brown clay loam with calcrete, quartz and metamorphosed granite stones, occasionally over calcrete outcropping, on colluvial outwashes of ranges and colluvial stony plains.</p> <p>14: Tall to mid sparse shrubland of mixed species including <i>Acacia inaequilatera</i>, <i>Grevillea pyramidalis</i> subsp. <i>leucadendron</i> and <i>Acacia orthocarpa</i> over low hummock grassland dominated by <i>Triodia chichesterensis</i> and/or <i>Triodia wiseana</i> on brown, red or red-brown clay loam with dolerite, calcrete and quartz stones, often with dolerite or granite outcropping, on low hills</p> <p>15: Mid isolated shrubs of <i>Acacia synchronicia</i> over low isolated chenopod shrubs of <i>Maireana georgei</i> over mid hummock grassland of <i>Triodia longiceps</i> over low sparse forland, tussock grassland and sedgeland of mixed species including <i>Portulaca oleracea</i>, <i>Ptilotus exaltatus</i>,</p>

Characteristic	Details
	<p><i>Cynodon prostratus</i>, <i>Sporobolus australasicus</i> and <i>Fimbristylis dichotoma</i> on red clay loam with colluvial stones on slightly saline plains and flats.</p> <p>16: Low isolated shrubs to sparse shrubland of <i>Acacia stellaticeps</i> and <i>Pluchea ferdinandi-muelleri</i> over low open hummock grassland to hummock grassland dominated by <i>Triodia angusta</i>, <i>Triodia secunda</i> and/or <i>Triodia longiceps</i> over low sparse forbland and tussock grassland of mixed species including <i>Trianthema triquetrum</i>, <i>Sporobolus australasicus</i>, <i>Eriachne obtusa</i> and <i>Calandrinia stagnensis</i> on redbrown or brown sandy clay on low lying, slightly saline plains.</p>
Vegetation condition	<p>The vegetation survey (Umwelt, 2025) indicates the vegetation within the proposed clearing area is in excellent to completely degraded (Trudgen, 1991) condition, with the majority classified as excellent.</p> <p>The full Trudgen (1991) condition rating scale is provided in Appendix C.</p>
Climate and landform	The application area is mapped at an elevation of approximately 120 to 330 metres Australian Height Datum (GIS Database). Average annual rainfall at the nearest weather station (Marble Bar) is approximately 361.7 millimetres (BoM, 2025).
Soil description	<p>The soils of the application area are broadly mapped as the following (DPIRD, 2025):</p> <ul style="list-style-type: none"> • Boolgeeda system (280Bg): Stony lower slopes and plains below hill systems supporting hard and soft spinifex grasslands or mulga shrublands • Capricorn system (280Cp): Rugged sandstone hills, ridges, stony foot slopes and interfluvies supporting low acacia shrub lands or hard spinifex grasslands with scattered shrubs; • Macroy system (283Mc): Stony plains and occasional tor fields based on granite supporting hard and soft spinifex shrubby grasslands; • Platform system (280PI): Dissected slopes and raised plains supporting shrubby hard spinifex grasslands; • River system (283Ri): Narrow, seasonally active floodplains and major river channels supporting moderately close tall shrublands or woodlands of Acacias and fringing communities of Eucalypts sometimes with tussock grasses or spinifex; • Rocklea system (280Rk): Basalt hills, plateaux, lower slopes and minor stony plains supporting hard spinifex and occasionally soft spinifex grasslands with scattered shrubs; • Talga system (280TI): Hills and ridges of greenstone and chert and stony plains supporting hard and soft spinifex grasslands; • Uaroo system (281Ua): Broad sandy plains, pebbly plains and drainage tracts supporting hard and soft spinifex hummock grasslands with scattered Acacia shrubs.
Land degradation risk	<p>The River system is highly susceptible to erosion if vegetative cover is removed (van Vreeswyk et al., 2004).</p> <p>The Uaroo system is generally not susceptible to erosion but there is occasionally erosion evident on drainage tracts (van Vreeswyk et al., 2004).</p> <p>The other land systems are generally not prone to erosion (van Vreeswyk et al., 2004).</p>
Waterbodies	Several minor, non-perennial watercourses are mapped within the application area, the most significant being the Turner River (GIS Database).
Hydrogeography	The application area is not mapped within any Public Drinking Water Source Areas (GIS Database). The mapped groundwater salinity is 500 to 1,000 milligrams per litre total dissolved solids which is described as marginal (GIS Database).
Flora	<p>Eight conservation significant flora species have been recorded within the application area:</p> <ul style="list-style-type: none"> • <i>Abutilon</i> aff. <i>Hannii</i> (potentially undescribed) • <i>Euphorbia clementii</i> (Priority 3) • <i>Euploca mutica</i> (Priority 3) (previously known as <i>Heliotropium muticum</i>) • <i>Goodenia obscurata</i> (Priority 3) • <i>Gymnanthera cunninghamii</i> (Priority 3) • <i>Terminalia supranitfolia</i> (Priority 3) • <i>Triodia chichesterensis</i> (Priority 3) • <i>Vigna triodiophila</i> A.E.Holland & R.Butcher (Priority 3) <p>A further two species have been recorded within the wider flora survey area, but not within the application area:</p> <ul style="list-style-type: none"> • <i>Ptilotus mollis</i> (Priority 4) • <i>Triodia basitricha</i> (Priority 3)

Characteristic	Details
	<p>A search of available databases indicates an additional 17 conservation significant flora species have been recorded within 50 kilometres of the application area:</p> <ul style="list-style-type: none"> • <i>Abutilon</i> sp. Pritzelianum (S. van Leeuwen 5095) (Priority 3) • <i>Acacia leeuweniana</i> (Priority 1) • <i>Acacia levata</i> (Priority 3) • <i>Bulbostylis burbridgeae</i> (Priority 4) • <i>Cochlospermum macnamarae</i> (Priority 1) • <i>Dolichocarpa</i> sp. Hamersley Station (A.A. Mitchell PRP 1479) • <i>Eragrostis crateriformis</i> (Priority 3) • <i>Euphorbia inappendiculata</i> var. <i>inappendiculata</i> (Priority 3) • <i>Gomphrena leptophylla</i> (Priority 3) • <i>Heliotropium murinum</i> (Priority 3) • <i>Josephinia</i> sp. Woodstock (A.A. Mitchell PRP 989) (Priority 1) • <i>Nicotiana umbratica</i> (Priority 3) • <i>Phyllanthus hebecarpus</i> (Priority 3) • <i>Quoya zonalis</i> (Endangered) • <i>Rothia indica</i> subsp. <i>australis</i> (Priority 3) • <i>Stylidium weeliwolli</i> (Priority 3) • <i>Themeda</i> sp. Panorama (J. Nelson et al. NS 102) (Priority 1)
Ecological communities	No Threatened or Priority ecological communities have been recorded within the application area (GIS Database). The nearest recorded Priority Ecological Community is located approximately six kilometres from the application area (GIS Database).
Fauna	<p>Five conservation significant fauna species have been recorded within the application area:</p> <ul style="list-style-type: none"> • <i>Dasyurus hallucatus</i> (northern quoll) (Endangered) • <i>Macroderma gigas</i> (ghost bat) (Vulnerable) • <i>Rhinonictis aurantia</i> (Pilbara leaf-nosed bat) (Vulnerable) • <i>Macrotis lagotis</i> (bilby) (Vulnerable) • <i>Pseudomys chapmani</i> (western pebble-mound mouse) (Priority 4) <p>A further three species have been recorded within the wider fauna survey area, but not within the application area:</p> <ul style="list-style-type: none"> • <i>Lagorchestes conspicillatus leichardti</i> (spectacled hare-wallaby (mainland)) (Priority 4) • <i>Sminthopsis longicaudata</i> (long-tailed dunnart) (Priority 4) • <i>Amytornis whitei</i> subsp. <i>whitei</i> (rufous grasswren) (Priority 4) <p>A search of available databases indicates several other conservation significant fauna species have been recorded within 50 kilometres of the application area (GIS Database).</p>
Fauna habitat	<p>The following fauna habitats have been identified within the application area (Mineral Resources, 2025):</p> <ul style="list-style-type: none"> • Drainage line • Ironstone ridge top • Rocky foothills • Rocky ridge and gorge • Spinifex stony plain • Spinifex sandplain • Stony rises • Disturbed areas

A.2. Vegetation extent

	Pre-European area (ha)	Current extent (ha)	Extent remaining (%)	Current extent in all DBCA managed land (ha)	Current extent in all DBCA Managed Land (proportion of pre-European extent) (%)
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IBRA Bioregion - Pilbara	17,808,657	17,731,765	~99	1,801,715	~10
Beard vegetation associations - State					
82	2,565,901	2,553,206	~99	295,378	~12
93	3,044,310	3,040,641	~99	59,537	~2
619	119,374	118,205	~99	236	~1
626	117,724	117,198	~99	18,348	~16
Beard vegetation associations - Bioregion					
82	2,563,583	2,550,888	~99	295,378	~12
93	3,042,114	3,038,472	~99	59,537	~2
619	118,920	118,117	~99	236	~1
626	117,724	117,198	~99	18,348	~16

Government of Western Australia (2019)

A.3. Flora analysis table

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

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Are surveys adequate to identify? [Y, N, N/A]
<i>Abutilon</i> aff. <i>Hannii</i>	Potentially undescribed	Y	Y	<5	Y
<i>Abutilon</i> sp. Pritzelianum (S. van Leeuwen 5095)	P3	Y	Y	<25	Y
<i>Acacia leeuweniana</i>	P1	N	N	<15	Y
<i>Acacia levata</i>	P3	N	N	<20	Y
<i>Bulbostylis burbridgeae</i>	P4	Y	Y	<10	Y
<i>Cochlospermum macnamarae</i>	P1	Y	N	<35	Y
<i>Dolichocarpa</i> sp. Hamersley Station (A.A. Mitchell PRP 1479)	P3	N	N	<45	Y
<i>Eragrostis crateriformis</i>	P3	Y	Y	<20	Y
<i>Euphorbia clementii</i>	P3	Y	Y	0	Y
<i>Euphorbia inappendiculata</i> var. <i>inappendiculata</i>	P3	Y	Y	<45	Y
<i>Euploca mutica</i>	P3	Y	Y	0	Y
<i>Gomphrena leptophylla</i>	P3	Y	Y	<10	Y
<i>Goodenia obscurata</i>	P3	Y	Y	0	Y
<i>Gymnanthera cunninghamii</i>	P3	Y	Y	<5	Y
<i>Heliotropium murinum</i>	P3	Y	Y	<50	Y
<i>Josephinia</i> sp. Woodstock (A.A. Mitchell PRP 989)	P1	Y	Y	<50	Y
<i>Nicotiana umbratica</i>	P3	N	N	0	Y
<i>Phyllanthus hebecarpus</i>	P3	N	N	<10	Y
<i>Ptilotus mollis</i>	P4	Y	Y	<25	Y
<i>Quoya zonalis</i>	EN	Y	Y	>10	Y

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Are surveys adequate to identify? [Y, N, N/A]
<i>Rothia indica</i> subsp. <i>australis</i>	P3	Y	Y	<15	Y
<i>Stylidium weeliwoolli</i>	P3	N	N	<10	Y
<i>Terminalia supranitifolia</i>	P3	Y	Y	0	Y
<i>Themeda</i> sp. Panorama (J. Nelson et al. NS 102)	P1	Y	Y	<15	Y
<i>Triodia basitricha</i>	P3	Y	Y	0	Y
<i>Triodia chichesterensis</i>	P3	Y	Y	0	Y
<i>Vigna triodiophila</i> A.E.Holland & R.Butcher	P3	Y	Y	<5	Y

A.4. Fauna analysis table

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Distance of closest record to application area (km)	Are surveys adequate to identify? [Y, N, N/A]
<i>Actitis hypoleucos</i> (common sandpiper)	MI	N	N	<10	Y
<i>Anilius ganei</i> (Gane's blind snake (Pilbara))	P1	Y	Y	>5	Y
<i>Antechinomys longicaudata</i> (long-tailed dunnart)	P4	Y	Y	<20	Y
<i>Apus pacificus</i> (fork-tailed swift)	MI	Y	Y	<5	Y
<i>Arenaria interpres</i> (ruddy turnstone)	MI	N	N	<35	Y
<i>Calidris acuminata</i> (sharp-tailed sandpiper)	MI	N	N	<35	Y
<i>Calidris ruficollis</i> (Red-necked stint)	MI	N	N	<35	Y
<i>Charadrius veredus</i> (Oriental plover)	MI	Y	Y	<10	Y
<i>Ctenotus nigrilineatus</i> (pin-striped finessnout Ctenotus)	P1	Y	Y	<35	Y
<i>Dasyercus blythi</i> (brush-tailed mulgara)	P4	N	N	0	Y
<i>Dasyurus hallucatus</i> (northern quoll)	EN	Y	Y	0	Y
<i>Falco hypoleucos</i> (grey falcon)	VU	Y	Y	<5	Y
<i>Falco peregrinus</i> (peregrine falcon)	OS	Y	Y	0	Y
<i>Fregata ariel</i> (lesser frigatebird)	MI	N	N	<35	Y
<i>Glareola maldivarum</i> (oriental pratincole)	MI	N	N	<40	Y
<i>Hipposideros stenotis</i> (northern leaf-nosed bat)	P2	Y	Y	<5	Y
<i>Hydroprogne caspia</i> (Caspian tern)	MI	N	N	<35	Y
<i>Lagorchestes conspicillatus leichardti</i> (spectacled hare-wallaby (mainland))	P4	Y	Y	0	Y
<i>Leggadina lakedownensis</i> (northern short-tailed mouse, Lakeland Downs mouse, kerakenga)	P4	Y	Y	<35	Y
<i>Liasis olivaceus barroni</i> (Pilbara olive python)	VU	Y	Y	0	Y
<i>Macroderma gigas</i> (ghost bat)	VU	Y	Y	0	Y
<i>Macrotis lagotis</i> (bilby, dalgyte, ninu)	VU	Y	Y	0	Y
<i>Pandion haliaetus</i> (osprey)	MI	N	N	<30	Y
<i>Pseudomys chapmani</i> (western pebble-mound mouse, ngadji)	P4	Y	Y	0	Y

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Distance of closest record to application area (km)	Are surveys adequate to identify? [Y, N, N/A]
<i>Rhinonictes aurantia</i> (Pilbara) (Pilbara leaf-nosed bat)	VU	Y	Y	0	Y
<i>Sminthopsis longicaudata</i> (long-tailed dunnart)	P4	Y	Y	<5	Y
<i>Thalasseus bergii</i> (crested tern)	MI	N	N	<35	Y
<i>Trichosurus vulpecula arnhemensis</i> (northern brushtail possum (Kimberley))	VU	Y	Y	<50	Y
<i>Tringa brevipes</i> (grey-tailed tattler)	P4	N	N	<35	Y
<i>Tringa glareola</i> (wood sandpiper)	MI	N	N	<35	Y
<i>Tringa nebularia</i> (common greenshank)	MI	N	N	<35	Y

Appendix B. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
<p><u>Principle (a):</u> "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 contains records of eight Priority flora species (Mineral Resources, 2023). The permit area also contains a diversity of fauna habitats and supports several conservation significant species of fauna including northern quoll, bilby, ghost bat and Pilbara leaf-nosed bat.</p>	At variance	Yes <i>Refer to Section 3.2.1, above.</i>
<p><u>Principle (b):</u> "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."</p> <p><u>Assessment:</u></p> <p>The area proposed to be cleared contains significant habitat for conservation significant fauna species, including <i>Dasyurus hallucatus</i> (northern quoll), <i>Macroderma gigas</i> (ghost bat), <i>Macrotis lagotis</i> (bilby) and <i>Rhinonictes aurantia</i> (Pilbara leaf-nosed bat) (Mineral Resources, 2025).</p>	At variance	Yes <i>Refer to Section 3.2.2, above.</i>
<p><u>Principle (c):</u> "Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."</p> <p><u>Assessment:</u></p> <p>The area proposed to be cleared does not contain records of any Threatened flora species listed under the BC Act (Mineral Resources, 2025; GIS Database).</p>	Not likely to be at variance	No
<p><u>Principle (d):</u> "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."</p> <p><u>Assessment:</u></p> <p>The proposed clearing area does not contain species representative of a Threatened Ecological Community listed under the BC Act or EPBC Act (GIS Database).</p>	Not likely to be at variance	No
Environmental value: significant remnant vegetation and conservation areas		
<p><u>Principle (e):</u> "Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared."</p> <p><u>Assessment:</u></p> <p>The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30% of that present pre-1750, below which species loss appears to accelerate exponentially</p>	Not at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
at an ecosystem level (Commonwealth of Australia, 2001). The extent of the mapped vegetation type is over 99% at both a state and bioregional level. The vegetation proposed to be cleared is not considered to be part of a significant ecological linkage in the local area.		
<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, the proposed clearing will not have an impact on the environmental values of any conservation areas (GIS Database).</p>	Not likely to be at variance	No
Environmental value: land and water resources		
<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><u>Assessment:</u></p> <p>The proposed clearing will impact on riparian vegetation associated with non-perennial watercourses (GIS Database). The most significant watercourses are the Turner River and Turner River West (GIS Database).</p>	At variance	Yes <i>Refer to Section 3.2.3, above.</i>
<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 majority of the application area has been mapped as land systems which are generally not prone to erosion (van Vreeswyk et al., 2004). The Uaroo system is generally not susceptible to erosion but there is occasionally erosion evident on drainage tracts (van Vreeswyk et al., 2004). The River land system is highly susceptible to erosion if vegetation cover is removed (van Vreeswyk et al., 2004). Within the application area the River land system is associated with the Turner River and Turner River West tributary (GIS Database). There is 1.7 hectares of proposed disturbance of vegetation associated with these watercourses for the purpose of duplicating an existing raw water pipeline (Mineral Resources, 2025). The proposed clearing will be located directly adjacent to existing disturbance to minimise impacts on these watercourses. Potential impacts from erosion may be minimised by the implementation of a watercourse management condition.</p>	May be at variance	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>There are no Public Drinking Water Source Areas within or in close proximity to the application area (GIS Database). There are no permanent watercourses or wetlands within the area proposed to clear (GIS Database). Creek lines in the region are dry for most of the year, only flowing briefly immediately following significant rainfall. The proposed clearing is unlikely to result in significant changes to surface water quality.</p> <p>The groundwater within the application area is between 500 to 1,000 milligrams per litre of Total Dissolved Solids (GIS Database). This is considered to be marginal water. It would not be expected that the proposed clearing would cause salinity levels within the application or surrounding area to alter.</p>	Not likely to be at variance	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>There are several non-perennial watercourses within the application area and no permanent waterbodies (GIS Database). Temporary, localised flooding may occur briefly following heavy rainfall events; however, the proposed clearing is unlikely to increase the incidence or intensity of natural flooding.</p>	Not likely to be at variance	No

Appendix C. Vegetation condition rating scale

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

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 D. Sources of information

D.1. GIS datasets

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

- 10 metre contours (DPIRD-073)
- 2 metre contours (DPIRD-072)
- Cadastre (Polygon) (LGATE-217)
- Clearing Instruments Activities (Areas Approved to Clear) (DWER-076)
- Clearing Instruments Conditions (Areas Subject to Conditions) (DWER-077)
- Clearing Instruments Proposals (Areas Applied to Clear) (DWER-075)
- Clearing Referral Proposal (DWER-116)
- 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)
- Geographic Names (GEONOMA) (LGATE-013)
- Groundwater Salinity Statewide (DWER-026)
- HIR Carbon Sequestration Projects (DPLH-072)
- Hydrographic Catchments - Basins (DWER-027)
- Hydrographic Catchments - Catchments (DWER-028)
- Hydrographic Catchments - Divisions (DWER-029)
- Hydrographic Catchments - Subcatchments (DWER-030)
- Hydrological Zones of Western Australia (DPIRD-069)
- IBRA Vegetation Statistics
- IBSA Survey Details (DWER-118)
- Local Government Area (LGA) Boundaries (LGATE-233)
- Localities (LGATE-234)
- Native Title (Determination) (LGATE-066)

- Native Title (Fed Court) (LGATE-005)
- Native Title (ILUA) (LGATE-067)
- Native Title (NNTT) (LGATE-004)
- Native Vegetation Extent (DPIRD-005)
- PEOF Project Areas (DWER-125)
- Pre-European Vegetation (DPIRD-006)
- Public Drinking Water Source Areas (DWER-033)
- Ramsar Sites (DBCA-010)
- Referral - Permit Application Not Required (DWER-117)
- Regional Parks (DBCA-026)
- Reserves (LGATE-227)
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Rivers (DWER-036)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Mapping - Best Available (DPIRD-027)
- Soil Landscape Mapping - Project Areas (DPIRD-070)
- Soil Landscape Mapping - Rangelands (DPIRD-063)
- Soil Landscape Mapping - Soil Sites (DPIRD-071)
- Soil Landscape Mapping - Systems (DPIRD-064)
- Soil Landscape Mapping - Western Australia attributed by WA Soil Group (DPIRD-076)
- Soil Landscape Mapping - Zones (DPIRD-017)
- Townsites (LGATE-248)
- WA Now Aerial Imagery
- Wild Rivers (DWER-087)

Restricted GIS Databases used:

- ICMS (Incident Complaints Management System) – Points and Polygons
- 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)

D.2. References

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- Mineral Resources (2025) Wodgina Lithium Project – Native Vegetation Clearing Permit Application. Report prepared by Mineral Resources, March 2025.
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5. 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 (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	<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> (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	<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:

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.