Department of Mines, Petroleum and Exploration

GOVERNMENT OF WESTERN AUSTRALIA

Clearing Permit Decision Report

1. Application details and outcomes

1.1. Permit application details

Permit number:	10968/1
Permit type:	Purpose permit
Applicant name:	Emerald Resources Pty Ltd
Application received:	18 February 2025
Application area:	750 hectares
Purpose of clearing:	Mineral production and associated activities
Method of clearing:	Mechanical removal
Tenure:	Mining Leases 37/108, 37/519, 37/1167, 37/1309
	Miscellaneous Licences 37/144, 37/284
Location (LGA area/s):	Shire of Leonora
Colloquial name:	Dingo Range Gold Project

1.2. Description of clearing activities

Emerald Resources (WA) Pty Ltd (Emerald Resources) proposes to clear up to 750 hectares of native vegetation within a boundary of approximately 3,636 hectares, for the purpose of mineral production and associated activities. The project is located approximately 95 kilometres in a northeast direction of Leinster, within the Shire of Leonora.

The application is to allow for mineral production and associated activities.

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	18 December 2025
Decision area:	750 hectares of native vegetation

1.4. Reasons for decision

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

In making this decision, the Delegated Officer had regard for the site characteristics (Appendix 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 assessment identified that the proposed clearing may result in:

- the potential introduction and spread of weeds into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values;
- potenital impacts on watercourses; and
- potential land degradation due to soil erosion.

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

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

- avoid, minimise to reduce the impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds;
- commence construction no later than three months after undertaking clearing to reduce the risk of erosion; and
- avoid clearing watercourses where practicable, and ensure surface flows are maintained or reinstated downstream

2. Legislative context

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

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

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

Other legislation of relevance for this assessment include:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *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
- China-Australia Migratory Bird Agreement
- Republic of Korea-Australia Migratory Bird Agreement

The key guidance documents which inform this assessment are:

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

3. Detailed assessment of application

3.1. Avoidance and mitigation measures

The proponent has outlined the following avoidance and mitigation measure to reduce impacts on native vegetation (Emerald Resources, 2025):

- The clearing permit area has been designed to avoid clearing within breakaway habitat and avoid clearing within a 10 metre radius of the priority flora taxon *Eremophila pungens* (P3);
- Clearing will be concentrated adjacent to areas of existing mine clearing where possible; and
- Pre-clearing weed hygiene measures will be implemented.

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. Additionally, further management conditions have been placed on the clearing permit to mitigate and minimise potential impacts to environmental values.

3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (Appendix 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 may present a risk to biological values (fauna, flora and vegetation). 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 and fauna) - Clearing principle (a) and (b)

Assessment

Botanica Consulting (2024) undertook a flora and vegetation survey in April 2024. Within the application area, Botanica (2024) identified two Priority flora species: *Grevillea inconspicua* (P4) and *Eremophila pungens* (P4). A desktop study completed by Botanica (2024) confirmed that both species also occur within a 40-kilometre radius of the application area, supported by database records.

The estimated total number of mature *Grevillea inconspicua* plants recorded within the application area was approximately 11,521, with an estimated 0.43% of the local population expected to be impacted (Botanica, 2024). *Eremophila pungens* was recorded in a section of the application area that has been excluded from the proposed clearing; therefore, this species will not be affected. Neither Priority Four species is endemic to the region, and both are well represented throughout the Eastern and Western Murchison subregions (Botanica, 2024; WAH, 2018). Records also exist in Wanjarri Nature Reserve and multiple other Nature Reserve systems currently in the process of being gazetted (Botanica, 2024; WAH, 1998). Overall, the proposed clearing is not expected to significantly affect these species at either a local or regional scale.

Multiple fauna habitats were identified within the application area, and Botanica (2024) recorded a total of 23 fauna species during a basic fauna study, which included opportunistic sightings. However, no significant fauna species were confirmed within the application area, as supported by database records. Two significant species were considered as possibly occurring in the wider area — *Falco hypoleucos* (Grey Falcon) and *Dasycercus blyth* (Brush-tailed Mulgara) — but no suitable breeding habitat was identified within the application area. Database records indicate *Falco peregrinus* (peregrine falcon), a Specially Protected, Migratory species, is located within a 20 kilometre radius of the application area. The survey conducted by Botanica (2015b) did not identify any nests of this species within the survey area. It is likely that *Falco peregrinus* (peregrine falcon) may occasionally utilise the area as part of a much larger home range, however, its presence is expected to be infrequent (Botanica, 2015b).

The results of Botanica's (2024) literature review, combined with field observations, suggest that the probability of these fauna species occurring within the application area is low, due to the extent and quality of available habitat.

Conclusion

Based on the above assessment, the proposed clearing is unlikely to cause local impacts to priority flora and is also unlikely to include significant habitat for conservation significant fauna. The species identified are well represented both locally and across the Murchison subregions. Consequently, the proposed clearing is not expected to have a significant effect on priority flora. The potential impacts on native vegetation and biodiversity can be effectively managed by taking steps to minimise the risk of the introduction and spread of weeds.

Condition

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

- avoid, minimise to reduce the impacts and extent of clearing; and
- take hygiene steps to minimise the risk of the introduction and spread of weeds.

3.3. Relevant planning instruments and other matters

The clearing permit application was advertised on 11 March 2025 by the Department of Mines, Petroleum and Exploration inviting submissions from the public. No submissions were received in relation to this application.

There are two native title claims over the area under application (DPLH, 2025). This has been determined by the Federal Court on behalf of the claimant group. The mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are no 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.

Other relevant authorisations required for the proposed land use include:

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

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

End

Appendix A. Site characteristics

A.1. Site characteristics

<table>
<tr><th>Characteristic</th><th>Details</th></tr>
<tr><td>Local context</td><td>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 surrounded by the native vegetation of the Murchinson bioregion.</td></tr>
<tr><td>Ecological linkage</td><td>According to aerial imagery the application area does not form part of any formal or informal ecological linkages (GIS Database).</td></tr>
<tr><td>Conservation areas</td><td>The application area does not form part of any known or mapped conservation areas. The closest Nature Reserve is Wanjarri Nature Reserve approximately 53 kilometres to the west of the application area.</td></tr>
<tr><td>Vegetation description</td><td>The vegetation of the application area is broadly mapped as the following Beard vegetation associations:
18: Low woodland; mulga (Acacia aneura);
39: Shrublands; mulga scrub; and
107: Hummock grasslands, shrub steppe; mulga and Eucalyptus kingsmillii over hard spinifex (GIS Database; Botanica, 2024).

A flora and vegetation survey was conducted over the application area by Botanica Consulting (Botanica) in April 2024. The following vegetation associations were recorded within the application area (Botanica, 2024):

<table>
<tr><th>Vegetation Association</th><th>Description</th></tr>
<tr><td>B-AOW1</td><td>Open low woodland of Acacia incurvaneura/A. pruinocarpa/ Callitris columellaris over low scrub of Dodonaea petiolaris/Thryptomene decussata and dwarf scrub of Ptilotus obovatus/low grass of Eragrostis eriopoda on breakaway</td></tr>
<tr><td>CLP-AFW1</td><td>Low woodland of Acacia caesaneura/ A. incurvaneura/ A. mulganeura over low scrub of Eremophila spp. and low grass of Eragrostis eriopoda on clay-loam plain</td></tr>
<tr><td>CLP-AFW3</td><td>Low woodland of Acacia incurvaneura/A. pruinocarpa over open low scrub of Eremophila spectabilis subsp. brevis/Ptilotus obovatus/Sida calyxhymenia and low grass of Eragrostis eriopoda on clay-loam plain</td></tr>
<tr><td>CLP-OS1</td><td>Open scrub of Hakea preissii over low scrub of Maireana pyramidata/ Senna sp. Meekatharra (E. Bailey 1-26) and dwarf scrub of Maireana glomerifolia on clay-loam plain</td></tr>
<tr><td>OD-AFW1</td><td>Low woodland/Forest of Acacia caesaneura/A. incurvaneura over open mixed low scrub of Acacia/ Eremophila/ Sida spp. and low grass of Eragrostis eriopoda/ Eriachne spp. in drainage depression</td></tr>
<tr><td>RH-AFW1</td><td>Low woodland of Acacia ayersiana/A. incurvaneura/A. mulganeura over open mixed low scrub of Thryptomene spp./Eremophila spp. and dwarf scrub of Ptilotus obovatus/Sida sp. Golden calyces glabrous (H.N. Foote 32) on rocky ridge</td></tr>
<tr><td>RH-AFW2</td><td>Low woodland of Acacia incurvaneura over low scrub of Thryptomene decussata and low grass of Eriachne mucronata on rocky ridge</td></tr>
<tr><td>RP-AFW1:</td><td>Low woodland of Acacia incurvaneura / Hakea preissii over open low scrub of Senna spp. and low scrub of Ptilotus obovatus/ mixed Chenopods on rocky plain</td></tr>
<tr><td>RH-AOW1</td><td>Open low woodland of Acacia ayersiana/ A. quadrimarginea over scrub of A. burkittii/Hakea kippistiana over low scrub of Senna spp. and low scrub of Ptilotus obovatus on rocky hillslope</td></tr>
</table>
</td></tr>
<tr><td>Vegetation condition</td><td>The vegetation survey completed by Botanica (2024) indicated the vegetation within the proposed clearing area ranges from excellent to good (Trudgen, 1991).</td></tr>
</table>

<table>
<tr><th>Characteristic</th><th>Details</th></tr>
<tr><td>Climate and landform</td><td>The application area is located in an arid zone with an annual average rainfall (Shire of Leonora) of approximately 221.1 millimetres (BoM, 2025).</td></tr>
<tr><td>Soil description</td><td>The soil found in the application area is mapped as (DPIRD, 2025):

<table>
<tr><th>Soil system</th><th>Description</th></tr>
<tr><td>Duketon system</td><td>Stony wash plains and sandy banks supporting mulga shrublands and wanderrie grasses</td></tr>
<tr><td>Ararak system</td><td>Broad plains with mantles of ironstone gravel supporting mulga shrublands with wanderrie grasses</td></tr>
<tr><td>Jundee system</td><td>Hardpan plains with variable gravelly mantles and minor sandy banks supporting weakly groved mulga shrublands</td></tr>
<tr><td>Gransal system</td><td>Stony plains and low rises based on granite supporting mainly halophytic low shrublands</td></tr>
<tr><td>Laverton System
Brooking system</td><td>Greenstone hills and ridges with acacia shrublands
Prominent ridges of banded iron formation supporting mulga shrublands and occasional minor halophytic communities</td></tr>
<tr><td>Violet system</td><td>Gently undulating gravelly plains on greenstone, laterite and hardpan, with low stony rises and minor saline plains; supporting groved mulga and bowgada shrublands and occasionally chenopod shrublands</td></tr>
<tr><td>Tiger system</td><td>Gravelly hardpan plains and sandy banks with mulga shrublands and wanderrie grasses</td></tr>
<tr><td>Nubev system</td><td>Gently undulating stony plains, minor limonitic low rises and drainage floors supporting mulga and halophytic shrublands</td></tr>
<tr><td>Yanganoo system</td><td>Almost flat hardpan wash plains, with or without small wanderrie banks and weak groving; supporting mulga shrublands and wanderrie grasses on banks</td></tr>
</table></td></tr>
<tr><td>Land degradation risk</td><td>The land and soil systems within the application area exhibit a range of susceptibility to erosion, varying from low to high depending on specific landscape characteristics (Pringle et al., 1994).
Soils in this area are predominantly red loamy earths, red sandy earths, red shallow loams, red deep sands and red-brown hardpan shallow loams (Botanica, 2024). Sodic soils were identified within two vegetation communities in the application area, increasing the potential for erosion (Botanica, 2024).</td></tr>
<tr><td>Waterbodies</td><td>Botanica (2015a) indicated that multiple minor, non-perennial watercourses transect the area proposed to be cleared. This was confirmed by aerial imagery (GIS Database).</td></tr>
<tr><td>Hydrogeography</td><td>The application area is not located within any Surface Water Areas (GIS Database). GIS Database records indicate that the application area is located within the Goldfields Groundwater Area. The mapped groundwater salinity is 0 to 1,000 milligrams per litre total dissolved solids which is described as freshwater (GIS Database).</td></tr>
<tr><td>Flora</td><td>Two Priority four flora species have been identified in the application area (Botanica, 2024).</td></tr>
<tr><td>Ecological communities</td><td>No Threatened or Priority Ecological communities have been recorded within the application area (GIS Database). The nearest Threatened Ecological Community is Banjawarn and Melrose (Lake Darlot) calcrete groundwater assemblage type on Carey palaeodrainage on Banjawarn and Melrose Stations, which is situated approximately 18 kilometres south of the application area (GIS Database).</td></tr>
<tr><td>Fauna</td><td>A search of the available database indicated only one Specially Protected, Migratory species located within a 20 kilometre radius of the application area. One Priority four fauna species was listed as ‘possibly occurs’ occurring to Botanica (2024). No Priority or Threatened fauna species were recorded within the application area (Botanica, 2024).</td></tr>
<tr><td>Fauna habitat</td><td>Broad scale terrestrial fauna habitats within the survey area described by Botanica (2024) are listed below:

<table>
<tr><th>Fauna Habitat</th><th>Description</th></tr>
<tr><td>Clay – Loam Plains</td><td>Low forests to open low woodlands of Acacia or Hakea over low scrub/dwarf scrub over low grass.</td></tr>
<tr><td>Rocky Hillslopes</td><td>Low woodlands of Acacia or Hakea over low scrub/open low scrub/dwarf scrub of mixed species.</td></tr>
<tr><td>Rocky Plains</td><td>Low woodlands of Acacia over low scrub/open low scrub over dwarf scrub or mixed chenopods.</td></tr>
<tr><td>Open Depressions</td><td>Low woodland/Forest of Acacia over open low scrub and low grass.</td></tr>
<tr><td>Sand-Loam Plains</td><td>Very open /open shrub mallee, low forest and open low</td></tr>
</table></td></tr>
</table>

Characteristic	Details	
		woodland of Eucalyptus, Acacia or Hakea over dense hummock grassland or dwarf scrub.
	Breakaways	Open low woodland of Acacia over low scrub and dwarf scrub of various species over low grass.
	Closed Depressions	Low Woodland/open low woodland of Acacia over mixed low scrub or low dwarf scrub and low heath in salt playa.

Appendix B. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
Principle (a): *"Native vegetation should not be cleared if it comprises a high level of biodiversity."* Assessment: The area proposed to be cleared contains records of two Priority four flora species. *Grevillea inconspicua* which was recorded in abundance at various locations within the application area (Botanica, 2024), and one record of *Eremophila pungens.* No Priority Ecological Communities were identified within the application area (Botanica, 2024; GIS Database). The two introduced species identified in the application area are not listed as a Declared Pest under the *Biosecurity and Agriculture Management Act 2007* (BAM Act). 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.	May be at variance	Yes Refer to Section 3.2.1, above
Principle (b): *"Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna."* Assessment: The area proposed to be cleared is unlikely to contain significant foraging, roosting, or breeding habitat for conservation significant fauna.	May be at variance	Yes Refer to Section 3.2.1, above
Principle (c): *"Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."* Assessment: The area proposed to be cleared is unlikely to contain habitat for flora species listed under the BC Act (Botanica, 2024, GIS Database). There were no Threatened flora species recorded within the application area (Botanica, 2024).	Not likely to be at variance	No
Principle (d): *"Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community."* Assessment: The application area proposed to be cleared does not intercept any mapped or known ecological communities and the vegetation associations identified in the application area do not form part of any known or mapped Threatened Ecological Communities (Botanica 2024; GIS Database).	Not at variance	No
Environmental value: significant remnant vegetation and conservation areas		
Principle (e): *"Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared."* Assessment: The pre-European Beard vegetation associations within the application area occur within the Eastern Murchison, a subregion of the Murchison Region, where all vegetation associations retain approximately 98 percent of their original extent (Botanica, 2024; Government of Western Australia, 2019).	Not at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
Principle (h): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area."* Assessment: Given the distance to the nearest conservation area – Wanjarri Nature Reserve - is approximately 53 kilometres to the west of the application area, the proposed clearing is not likely to have an impact on the environmental values of these nearby conservation areas (Botanica, 2024; GIS Database).	Not at variance	No
Environmental value: land and water resources		
Principle (f): *"Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland."* Assessment: Multiple minor, non-perennial watercourses transect the application area (GIS Database). The proposed clearing will riparian vegetation, however, should not completely disrupt the flow of water along these watercourses. Potential impacts on watercourses in the application area can be minimised by the implementation of a watercourse management condition requiring the maintenance of existing water flows.	Not likely to be at variance	No
Principle (g): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."* Assessment: The land and soil systems within the application area exhibit a range of susceptibility to erosion, varying from low to high depending on specific landscape characteristics (Pringle et al., 1994). Botanica (2024) reported that a soil analysis conducted as part of mining approvals identified soils as acidic (pH 4-6) and non-saline. The majority of the soils were non-sodic. Sodic soils were identified within two vegetation communities: RH-AOW2 and RP-AFW2. Sodic soils are known to increase erosion risk therefore in order to minimise erosion, it is recommended that management measures include staged progressive clearing, surface water management, and dust suppression techniques are considered. Potential impacts to land degradation can be minimised by the implementation of a staged clearing condition.	Not likely to be at variance	No
Principle (i): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water."* Assessment: Given that the application area is not located within any Surface Water Areas (GIS Database), and that any water courses occurring within the application area are considered non-perennial and minor, the proposed clearing is unlikely to impact surface or ground water quality. Groundwater within the application area are considered to be of marginal water quality due to elevated total dissolved solids levels. The proposed clearing is not expected to alter salinity levels or affect the quality of either surface or underground water within the application area and surrounding areas.	Not likely to be at variance	No
Principle (j): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding."* Assessment: The application area contains no permanent waterbodies (GIS Database). While several, temporary, non-perennial, minor watercourses are present, and localised flooding may occur briefly after heavy rainfall events, the proposed clearing is unlikely to increase the frequency or severity of natural flooding.	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):

- 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)
- Groundwater Salinity Statewide (DWER-026)
- IBRA Vegetation Statistics
- Local Government Area (LGA) Boundaries (LGATE-233)
- Localities (LGATE-234)
- Mineral Field Boundaries (DMIRS-005)
- Native Title (Determination) (LGATE-066)
- Native Title (Fed Court) (LGATE-005)
- Native Title (ILUA) (LGATE-067)
- Native Title (NNTT) (LGATE-004)
- Native Vegetation Extent (DPIRD-005)
- Pre-European Vegetation (DPIRD-006)
- Public Drinking Water Source Areas (DWER-033)
- Regional Parks (DBCA-026)
- Reserves (LGATE-227)
- 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 - 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 - Zones (DPIRD-017)
- Townsites (LGATE-248)
- WA Now Aerial Imagery
- WRIMS - Groundwater Areas (DWER-085)
- WRIMS - Groundwater Resources (DWER-084)
- WRIMS - Surface Water Areas (DWER-082)

Restricted GIS Databases used:

- Threatened and Priority Flora (TPFL)

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

D.2. References

Emerald Resources Pty Ltd (2025) Clearing permit application form, CPS 10968/1, received 18 February 2025.

Botanica Consulting (Botanica) (2015a) Level 2 Flora and Vegetation Survey, North Laverton Gold Project, Spring 2014 and Autumn 2015, Tenements: E37/1015, E37/1017, E37/1050, E37/1051, E37/1052, L37/145, M37/108, M37/519 & M37/1167. Prepared for Bullseye Mining Limited, July 2015.

Botanica Consulting (Botanica) (2015b) Fauna Assessment, Laverton Gold Project Bullseye Mining Limited, May 2015. Prepared for Bullseye Mining Limited by Botanica Consulting, May 2015.

Botanica Consulting (Botanica) (2024) North Laverton Gold Project, Flora and Fauna Assessment, Prepared for Emerald Resources NL, June 2024

Bureau of Meteorology (BoM) (2025) Bureau of Meteorology Website – Climate Data Online, Weather Station. Bureau of Meteorology. https://reg.bom.gov.au/climate/data/ (Accessed 13 November 2025).

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) (2025) Aboriginal Cultural Heritage Inquiry System. Department of Planning, Lands and Heritage. https://espatial.dplh.wa.gov.au/ACHIS/index.html?viewer=ACHIS (Accessed 13 November 2025).

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Glossary

Acronyms:

BC Act	*Biodiversity Conservation Act 2016,* Western Australia
BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia (now DPLH)
DAFWA	Department of Agriculture and Food, Western Australia (now DPIRD)
DCCEEW	Department of Climate Change, Energy, the Environment and Water, Australian Government
DBCA	Department of Biodiversity, Conservation and Attractions, Western Australia
DEMIRS	Department of Energy, Mines, Industry Regulation and Safety (now DMPE)
DER	Department of Environment Regulation, Western Australia (now DWER)

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

Definitions:

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

Threatened species

T Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the Biodiversity Conservation Act 2016 (BC Act).

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

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

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

CR **Critically endangered species**

Threatened species considered to be "*facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines*".

Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines.

EN **Endangered species**

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

Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines.

VU **Vulnerable species**

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

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

Extinct species

Listed by order of the Minister as extinct under section 23(1) of the BC Act as extinct or extinct in the wild.

EX **Extinct species**

Species where "*there is no reasonable doubt that the last member of the species has died*", and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).

EW **Extinct in the wild species**

Species that *"is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form*", and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).

Currently there are no threatened fauna or threatened flora species listed as extinct in the wild.

Specially protected species

SP **Specially protected species**

Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection.

Species that are listed as threatened species (critically endangered, endangered, or vulnerable) or extinct species under the BC Act cannot also be listed as specially protected species.

MI **Migratory species**

Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

Migratory species include birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) or The Republic of Korea (ROKAMBA), and fauna subject to the *Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

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

Species of special conservation need that are dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).

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

OS **Other specially protected species**

Species otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

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

Priority species

P **Priority species**

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

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

Species that may possibly be threatened species that do not meet the criteria for listing under the BC Act because of insufficient survey or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of prioritisation for survey and evaluation of conservation status so that consideration can be given to potential listing as threatened.

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

Assessment of priority status is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

P1 **Priority One - Poorly-known species – known from few locations, none on conservation lands**

Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, for example, agricultural or pastoral

lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation.

Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements for threatened listing and appear to be under immediate threat from known threatening processes. These species are in urgent need of further survey.

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

Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, for example, national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation.

Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements for threatened listing and appear to be under threat from known threatening processes. These species are in urgent need of further survey.

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

Species that are known from several locations and the species does not appear to be under imminent threat or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat.

Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. These species need further survey.

P4 **Priority Four - Rare, Near Threatened and other species in need of monitoring**

(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These species are usually represented on conservation lands.

(b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as a conservation dependent specially protected species.

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

(d) Other species in need of monitoring.

Principles for clearing native vegetation:

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

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

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

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

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

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

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

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

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