

# Clearing Permit Decision Report

## 1. Application details and outcomes

### 1.1. Permit application details

Permit number:	9173/2
Permit type:	Purpose Permit
Applicant name:	GMA Garnet Pty Ltd
Application received:	30 August 2024
Application area:	50.71 hectares
Purpose of clearing:	Mineral Production and Associated Activities
Method of clearing:	Mechanical Removal
Tenure:	Mining Lease 70/204
Location (LGA area):	Shire of Northampton Project name
Colloquial name:	Lynton North Project

### 1.2. Description of clearing activities

GMA Garnet Pty Ltd proposes to clear up to 50.71 hectares of native vegetation within a boundary of approximately 50.8 hectares, for the purpose of mining related infrastructure (GMA, 2024a). The project is located approximately three kilometres north-east of Port Gregory, within the Shire of Northampton (GIS Database).

The application is to allow for the progressive expansion of the Lynton southwest pit (GMA, 2024b).

Clearing permit CPS 9173/1 was granted by the Department of Mines, Industry Regulation and Safety (now the Department of Energy, Mines, Industry Regulation and Safety) on 18 March 2021 and was valid from 10 April 2021 to 9 April 2031. The permit authorised the clearing of up to 47.99 hectares of native vegetation within a boundary of approximately 48.03 hectares, for the purpose of mineral production and associated activities.

On 30 August 2024, the Permit Holder applied to amend CPS 9173/1 to increase the permit boundary and increase the area to be cleared by 2.72 hectares (GMA, 2024). According to the latest Annual Clearing Report, approximately 10.5 hectares has been cleared under this permit.

### 1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	29 April 2025
Decision area:	50.71 hectares of native vegetation

### 1.4. Reasons for decision

This clearing permit application was submitted, accepted, assessed, and determined in accordance with sections 51KA(1) and 51O of the *Environmental Protection Act 1986* (EP Act). The Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) advertised the application for a public comment for a period of 21 days, and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (Appendix A), relevant datasets (Appendix 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;
- the loss of native vegetation that is a significant remnant of native vegetation; and
- potential land degradation in the form of wind erosion.

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

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

- avoid, minimise to reduce the impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds;
- staged clearing to minimise wind erosion; and
- retain cleared vegetation and topsoil and respread this on already cleared areas of equivalent size within the mining tenements to ensure fauna habitat is not permanently lost.

The assessment has not changed since the assessment for CPS 9173/2, except in the case of principle (e) which has changed to at variance and principle (b) which has changed to may be at variance. The Delegated Officer determined that the proposed permit boundary increase and additional clearing of 2.72 hectares is not likely to lead to an unacceptable risk to environmental values.

## 1.5. Site map

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



**Figure 1. Map of the amendment area. The yellow area indicates the area approved under CPS 9173/1 and the green area indicates the additional areas applied for under CPS 9173/2.**

CPS 9173/2

## 2. Legislative context

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

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

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

Other legislation of relevance for this assessment include:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Conservation and Land Management Act 1984* (WA) (CALM Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
- *Mining Act 1978* (WA)

The key guidance documents which inform this assessment are:

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

## 3. Detailed assessment of application

### 3.1. Avoidance and mitigation measures

No additional risks were identified, or management required (GMA, 2024b). Avoidance and mitigation measures for previous versions of the permit will remain, including the following (GMA, 2022; 2024b):

#### Mining Activities

- clearing will be undertaken progressively;
- the mining voids will be progressively backfilled and rehabilitated at the trailing edge of the pit; and
- existing mining voids at the Lynton project will also be rehabilitated.

#### Exploration Activities

- track widths will be limited to the width of a scrub rake;
- where possible clearing of tracks will be avoided to retain vegetation; and
- clearing will be done using a blade up method to preserve topsoil.

#### Dust Management

- use of water trucks on sandy and unsealed areas;
- undertaking staged clearing to minimise open areas;
- undertaking rehabilitation as soon as practicable to reduce open areas;
- scheduling topsoil stripping to avoid periods of high winds;
- apply dust suppressant to overburden/topsoil stockpiles; and
- cease activities where causing dust lift-off where dust management measures have not prevented dust generation affecting sensitive receptors.

The Delegated Officer was satisfied that the applicant has made a reasonable effort to avoid and minimise potential impacts of the proposed clearing on environmental values.

### 3.2. Assessment of impacts on environmental values

A review of current environmental information (Appendix A) reveals that the assessment against the clearing principles has not changed significantly from the Clearing Permit Decision Report CPS 9173/1.

#### 3.2.1. Biological values / Significant remnant vegetation / Land degradation - Clearing Principles (a), (e) and (g)

##### Assessment

The amendment area includes the clearing of an additional 2.72 hectares of vegetation which has been mapped as *Acacia rostellifera* open woodland to woodland (GHD, 2020). The condition of the vegetation is degraded and completely degraded condition (GHD, 2020). The amendment area is not likely to contain habitat for any Threatened flora or represent a Threatened Ecological Community (GHD, 2020; GIS Database).

The permit area has mostly been mapped as cleared or is in completely degraded or degraded condition. The vegetation within the amendment area has been mapped as *Acacia* woodland which are more likely to provide suitable habitat for fauna species in the area. The amendment areas are both surrounded by existing cleared areas so their utilisation as a linkage in the landscape is likely to be limited.

### **Remnant vegetation**

The application area falls within the Geraldton Sandplains Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 44% of the pre-European vegetation still exists in the IBRA Geraldton Sandplains Bioregion (Government of Western Australia, 2019), which gives it a conservation status of 'Depleted' according to the Department of Natural Resources and Environment (2002). The local area (10 kilometres radius) has been extensively cleared for agricultural purposes.

The application area is broadly mapped as Beard vegetation association 371: low forest; *Acacia rostellifera* (GIS Database). Approximately 10% of the pre-European extent of vegetation association 371 remains uncleared at both the state, bioregional and subregional level (Government of Western Australia, 2019). This gives vegetation association 371 a conservation status of 'Vulnerable' according to the Department of Natural Resources and Environment (2002).

A vegetation and flora survey conducted by GHD (2020) mapped the vegetation of the application area at a much finer scale than the Beard vegetation mapping. The vegetation of the application area was mapped as VT01: *Acacia rostellifera* open woodland to woodland, which was inferred to represent Beard vegetation association 17: Shrublands; *Acacia rostellifera* thicket (GHD, 2020). Therefore, the proposed clearing will not reduce the extent of Beard vegetation association 371. Over 83% of the pre-European extent of vegetation association 17 remains uncleared at the state, bioregional and subregional levels (Government of Western Australia, 2019).

The application area is located on the intermediate slopes between the dune system in the east and Hutt Lagoon and the coastal plains in the west. The majority of the area to the east of the application area has been cleared for agriculture (GIS Database). The application area is located within a relatively intact band of vegetation along the eastern edge of Hutt Lagoon (GIS Database). The majority of the permit area has been previously cleared for mining activities and is a completely degraded or degraded condition (GHD, 2020). The vegetation within the amendment areas is mostly in a degraded condition with small areas in completely degraded condition. The amendment areas are surrounded by cleared areas on all sides so it is not likely to be a significant part of the ecological linkage in the local area (GIS Database).

### **Land degradation**

Water erosion has the potential to occur in cleared areas due primarily to the land slope (DPIRD, 2021). However, rainfall events that generate significant run-off are infrequent and the surface flow is generally very localised (DPIRD, 2021).

There is the risk of wind erosion from the proposed clearing due to the loose sandy nature of the soils and when cleared, these soils have the potential to mobilise under strong prevailing winds (DPIRD, 2021). This may impact on neighbouring and surrounding vegetation and properties. GMA Garnet Pty Ltd has protocols to manage risks associated with dust and include such measures as listed in section 3.1.

### **Conclusion**

Based on the above assessment, the proposed clearing will result in the clearing of vegetation which is part of a remnant and may increase the risk of wind erosion.

For the reasons set out above, it is considered that the impacts of the proposed clearing can be managed by taking steps to minimise the risk of wind erosion and rehabilitating the site post extraction to ensure the habitat is not permanently lost and reducing the risk of erosion.

### **Conditions**

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

- staged clearing to minimise wind erosion; and
- retain cleared vegetation and topsoil and respread this on already cleared areas of equivalent size within the mining tenements to ensure fauna habitat is not permanently lost.

## **3.3. Relevant planning instruments and other matters**

The clearing permit amendment application was advertised on 18 October 2024 by the Department of Energy, Mines, Industry Regulation and Safety inviting submissions from the public. No submissions were received in relation to this application.

There is one native title claim (WCD2020/001) over the area under application (DPLH, 2025). This claim has been determined by the Federal Court on behalf of the claimant group (Yamatji). However, 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 Proposal / Mine Closure Plan approved under the *Mining Act 1978*.

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

**End**

## Appendix A. Site characteristics

### A.1. Site characteristics

Characteristic	Details
Local context	The area proposed to be cleared is part of a remnant patch of native vegetation in the intensive land use zone of Western Australia (GIS Database). It is surrounded by areas of cleared agricultural land and also some adjacent areas of garnet mining (GIS Database).
Ecological linkage	The majority of the area to the east of the broader application area has been cleared for agriculture. The permit area is located within a relatively intact band of vegetation along the eastern edge of Hutt Lagoon that can function as an ecological linkage for fauna species moving through the landscape (GIS Database).
Conservation areas	The closest conservation area is the Utcha Well Nature Reserve which is located approximately 7.2 kilometres northwest of the amendment areas (GIS Database).
Vegetation description	<p>The vegetation of the permit area is broadly mapped as the following Beard vegetation association:</p> <ul style="list-style-type: none"> <li>371: Low forest; <i>Acacia rostellifera</i> (GIS Database).</li> </ul> <p>A flora and vegetation survey was conducted over the broader application area and surrounding areas on Mining Leases 70/204 and 70/1330 by GHD during December 2019. The following vegetation associations were recorded within the permit area (GHD, 2020):</p> <p><b>VT01 - <i>Acacia rostellifera</i> open woodland to woodland</b>  <i>Acacia rostellifera</i> open woodland to woodland over <i>Rhagodia preissii</i> subsp. <i>obovata</i>, <i>Pimelea microcephala</i> subsp. <i>microcephala</i>, <i>Olearia</i> sp. Kennedy Range (G. Byrne 66) and <i>Stylobasium spathulatum</i> open shrubland over <i>Austrostipa elegantissima</i> and <i>*Ehrharta longiflora</i> open grassland to grassland. Other common species include <i>Alyogyne hakeifolia</i>, <i>Roepera fruticulosa</i>, <i>Commicarpus australis</i> and <i>Euphorbia boophthona</i>. Occurs over lower and middle slopes on brown to orange sands.</p> <p><b>VT02 - <i>Melaleuca cardiophylla</i> shrubland to open shrubland</b>  <i>Melaleuca cardiophylla</i> shrubland to open shrubland over <i>Alyogyne hakeifolia</i>, <i>Pimelea microcephala</i> subsp. <i>microcephala</i> and <i>Rhagodia preissii</i> subsp. <i>obovata</i> open shrubland over <i>Ptilotus divaricatus</i> scattered forbland. Other common species include <i>Roepera fruticulosa</i>, <i>Pimelea gilgiana</i> and <i>*Bromus diandrus</i>. Areas that contain deeper soils <i>Acacia rostellifera</i> was also recorded. Occurs on upper mid slopes on white-brown sand with limestone outcropping.</p> <p>*denotes weed species</p> <p>Areas of the permit area have also been mapped as cleared, previously cleared regrowth and rehabilitated.</p>
Vegetation condition	<p>The vegetation survey (GHD, 2020) and aerial imagery indicate the vegetation within the proposed clearing area is in good to completely degraded (Keighery, 1994) condition.</p> <p>The full Keighery (1994) condition rating scale is provided in Appendix C.</p>
Climate and landform	The application area is located in a winter dominant area with a marked wet winter and dry summer with an annual average rainfall (Lynton) of 340.1 millimetres (BoM, 2025).
Soil description	The soil located within the amendment area is mapped as soil unit B26 (GIS Database). This soil unit is described as undulating dune landscape underlain by aeolianite which is exposed in places: chief soils are siliceous sands with some shallow grey-brown sandy soils (Northcote et al., 1960-68).
Land degradation risk	Water erosion has the potential to occur in cleared areas due primarily to the land slope (DPIRD, 2021). There is the risk of wind erosion from the proposed clearing due to the loose sandy nature of the soils and when cleared, these soils have the potential to mobilise under strong prevailing winds (DPIRD, 2021).
Waterbodies	The desktop assessment and aerial imagery indicated that there are no watercourses within the permit area (GIS Database). The field survey did not record any drainage lines or vegetation associated with drainage lines (GHD, 2020).
Hydrogeography	The mapped groundwater salinity is 1,000-3,000 milligrams per litre total dissolved solids which is described as brackish water quality (GIS Database).
Flora	There are no records of conservation significant flora within the application area (GIS Database). No Threatened or priority flora species were recorded within the flora survey area (GDH, 2020).
Ecological communities	The application area is not located within any known or mapped Threatened or Priority Ecological Communities. The Kalbarri Ironstone Community is mapped within eight kilometres of the proposed amendment area (GIS Database).
Fauna	There are no records of conservation significant fauna species located within the application area (GIS Database).

Characteristic	Details
Fauna habitat	There were three fauna habitats; Acacia woodlands, Melaleuca shrubland on limestone and rehabilitation areas, recorded within the application area (GHD, 2020). Other areas were mapped as 'cleared' which were previously cleared and contained little or no native vegetation. The cleared areas comprise the majority of the permit area. The rehabilitated areas were generally more open and had evidence of high grazing impacts, including from feral pigs (GHD, 2020). The Acacia woodlands and Melaleuca shrubland on limestone habitats are more likely to provide greater cover and suitable habitat for birds and reptiles (GHD, 2020). The amendment area has been mapped as Acacia woodlands (GHD, 2020).

## A.2. Vegetation extent

	Pre-European area (ha)	Current extent (ha)	Extent remaining (%)	Current extent in all DBCA managed land (ha)	Current extent in all DBCA Managed Land (proportion of pre-European extent) (%)
IBRA Bioregion - Geraldton Sandplains	3,136,037	1,404,424	~45	568,255	~18
IBRA Subregion - Geraldton Hills	1,964,262	901,446	~46	355,757	~18
Local Government - Northampton	1,258,428	930,228	~74	23,958	~18
Beard vegetation associations - State					
371	32,816	3,499	~11	242	~1
Beard vegetation associations - Bioregion					
371	32,807	3,499	~11	242	~1
Beard vegetation associations - subregion					
371	32,807	3,499	~11	242	~1

Government of Western Australia (2019)

## Appendix B. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
<b>Environmental value: biological values</b>		
<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>No species of Threatened or Priority flora were identified during a flora survey of the amendment area and surrounding areas. Fifteen species of weeds were recorded during the greater field survey of the amendment area and surrounding areas (GHD, 2020). 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 continued implementation of a weed management condition.</p>	<p>Not likely to be at variance</p> <p>(as per CPS 9173/1)</p>	No
<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>Carnaby's black cockatoo has been recorded in the local area however, there is no suitable roosting or foraging habitat present within the amendment areas (GHD, 2020). The broader application area forms part of an ecological linkage running north-west to south-east, with Hutt Lagoon to the west and large areas of cleared farmland to the east (GIS Database). This linkage is likely to be significant for fauna species in the local area. A revegetation and rehabilitation condition will continue to be implemented on the clearing permit to avoid permanent loss of this linkage.</p>	<p>May be at variance</p> <p>(changed from CPS 9173/1)</p>	<p>Yes</p> <p>Refer to Section 3.2.1, above.</p>



Assessment against the clearing principles	Variance level	Is further consideration required?
<p><u>Principle (c):</u> <i>"Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."</i></p> <p><u>Assessment:</u></p> <p>There were no records of Threatened flora species within the amendment areas (GHD, 2020; GIS Database). Targeted surveys for <i>Caladenia bryceana</i> subsp. <i>cracens</i> did not record any individuals as the habitat was considered to be too degraded and not consistent with orchid habitat recorded on adjacent tenement Mining Lease 70/1380 (GMA Garnet, 2024b).</p>	<p>Not likely to be at variance</p> <p>(as per CPS 9173/1)</p>	No
<p><u>Principle (d):</u> <i>"Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community."</i></p> <p><u>Assessment:</u></p> <p>There are no known or mapped Threatened Ecological Communities within the amendment areas (GHD, 2020; GIS Database).</p>	<p>Not likely to be at variance</p> <p>(as per CPS 9173/1)</p>	No
<b>Environmental value: significant remnant vegetation and conservation areas</b>		
<p><u>Principle (e):</u> <i>"Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared."</i></p> <p><u>Assessment:</u></p> <p>The local area has been extensively cleared and the vegetation within the amendment area forms part of an intact band of vegetation that runs along the eastern edge of Hutt Lagoon. The vegetation has been mapped as Beard vegetation association 371 which only has approximately 11% of its pre-European extent remaining however, the vegetation is not considered to be representative of this vegetation association (GHD, 2020; Government of Western Australia, 2019; GIS Database).</p>	<p>At variance</p> <p>(as per CPS 9173/1)</p>	<p>Yes</p> <p><i>Refer to Section 3.2.1, above.</i></p>
<p><u>Principle (h):</u> <i>"Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area."</i></p> <p><u>Assessment:</u></p> <p>There are no conservation areas in the vicinity of the application area. The nearest DBCA managed land is the Utcha Well Nature Reserve which is located approximately seven kilometres north-west of the application area (GIS Database). The proposed clearing is unlikely to impact on the environmental values of any conservation area.</p>	<p>Not likely to be at variance</p> <p>(as per CPS 9173/1)</p>	No
<b>Environmental value: land and water resources</b>		
<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>There are no permanent watercourses or wetlands within the area proposed to clear (GHD, 2020; GIS Database). Minor non-perennial watercourses and surface flow lines can be seen adjacent to the application area (GIS Database), however the field survey did not record any drainage lines or vegetation associated with drainage lines (GHD, 2020).</p>	<p>Not likely to be at variance</p> <p>(as per CPS 9173/1)</p>	No
<p><u>Principle (g):</u> <i>"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."</i></p> <p><u>Assessment:</u></p> <p>The mapped soils are susceptible to wind erosion when cleared (DPRID, 2021). The permit area also has potential for water erosion due to the slope of land (DPIRD, 2021).</p>	<p>May be at variance</p>	<p>Yes</p> <p><i>Refer to Section 3.2.1, above.</i></p>



Assessment against the clearing principles	Variance level	Is further consideration required?
<p><u>Principle (i):</u> "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."</p> <p><u>Assessment:</u></p> <p>There are no watercourses within the permit area and the flora survey of the area did not identify any vegetation as riparian (GHD, 2020: GIS Database). The nearest waterbody is Hutt Lagoon located approximately 250 metres west of the application area (GIS Database). The permit area is located on a slope which can cause localised areas of erosion however, the risk of water erosion in the area is low (DPRID, 2021). The proposed clearing is not likely to cause sediment runoff into the nearby Hutt Lagoon.</p> <p>There are no Public Drinking Water Source Areas within or in close proximity to the permit area (GIS Database). In the local area, stable or declining groundwater levels are observed in landscapes that are substantially cleared for agriculture (DPIRD, 2021). The permit area has already been significantly cleared for mining activities.</p>	<p>Not likely to be at variance</p> <p>(as per CPS 9173/1)</p>	No
<p><u>Principle (j):</u> "Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding."</p> <p><u>Assessment:</u></p> <p>There are no permanent water courses or waterbodies within the application area (GIS Database). The application area is located on a slope and any removal of vegetation has the potential to increase the velocity of water runoff following rainfall events. Based on the soils present the proposed clearing has a low risk of increasing the incidence or intensity of natural flooding events (DPIRD, 2021).</p>	<p>Not likely to be at variance</p> <p>(as per CPS 9173/1)</p>	No

## Appendix C. Vegetation condition rating scale

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

Considering its location, the scale below was used to measure the condition of the vegetation proposed to be cleared. This scale has been extracted from Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.

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

Condition	Description
Pristine	Pristine or nearly so, no obvious signs of disturbance.
Excellent	Vegetation structure intact, with disturbance affecting individual species; weeds are non-aggressive species.
Very good	Vegetation structure altered, with obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and/or grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and/or grazing.
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and/or grazing.
Completely degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.

## Appendix D. Sources of information

### D.1. GIS databases

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

- 10 Metre Contours (DPIRD-073)

- Aboriginal Heritage Places (DPLH-001)
- Bush Forever (Regional Scheme) (DPLH-022)
- Cadastre (LGATE-218)
- Contours (DPIRD-073)
- Clearing Regulations - Environmentally Sensitive Areas (DWER-046)
- Clearing Regulations - Schedule One Areas (DWER-057)
- DBCA - Lands of Interest (DBCA-012)
- DBCA - Legislated Lands and Waters (DBCA-011)
- DBCA Fire History (DBCA-060)
- Directory of Important Wetlands in Australia – Western Australia (DBCA-045)
- Groundwater Salinity Statewide (DWER-026)
- Hydrographic Catchments – Catchments (DWER-028)
- Hydrography – Inland Waters – Waterlines
- Hydrography, Linear (DWER-031)
- IBRA Vegetation Statistics
- Local Planning Scheme – Zones and Reserves (DPLH-071)
- Native Title (ILUA) (LGATE-067)
- Native Vegetation Extent (DPIRD-005)
- Pre-European Vegetation (DPIRD-006)
- Ramsar Sites (DBCA-010)
- Regional Parks (DBCA-026)
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Mapping – Best Available (DPIRD-027)
- Soil Landscape Mapping – Rangelands (DPIRD-064)
- WA Now Aerial Imagery

Restricted GIS Databases used:

- Threatened 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

- Bureau of Meteorology (BoM) (2025) Bureau of Meteorology Website – Climate Data Online, Kalbarri Station. Bureau of Meteorology. <https://reg.bom.gov.au/climate/data/> (Accessed 11 March 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](https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2_assessment_native_veg.pdf)
- Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.
- 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 10 April 2025).
- DPIRD (2021) Advice received in relation to Clearing Permit Application CPS 9172/1. Office of the Commissioner of Soil and Land Conservation, Department of Primary Industries and Regional Development, Western Australia, January 2021.
- Department of Water and Environmental Regulation (DWER) (2021) Procedure: Native vegetation clearing permits. Joondalup. <https://www.wa.gov.au/system/files/2023-06/procedure-native-vegetation-clearing-permits.pdf>
- Environmental Protection Authority (EPA) (2016) Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment. [http://www.epa.wa.gov.au/sites/default/files/Policies\\_and\\_Guidance/EPA%20Technical%20Guidance%20-%20Flora%20and%20Vegetation%20survey\\_Dec13.pdf](http://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/EPA%20Technical%20Guidance%20-%20Flora%20and%20Vegetation%20survey_Dec13.pdf)
- Environmental Protection Authority (EPA) (2020) Technical Guidance – Terrestrial Fauna Surveys. [https://www.epa.wa.gov.au/sites/default/files/Policies\\_and\\_Guidance/2020.09.17%20-%20EPA%20Technical%20Guidance%20-%20Vertebrate%20Fauna%20Surveys%20-%20Final.pdf](https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/2020.09.17%20-%20EPA%20Technical%20Guidance%20-%20Vertebrate%20Fauna%20Surveys%20-%20Final.pdf)
- GHD (2020) Lynton Mine Expansion Biological Survey. Report prepared by GHD Pty Ltd for GMA Garnet Pty Ltd, February 2020.
- GMA Garnet (GMA) (2022) GMA Mining Australia, Mining Tenement M70/204 and M70/1330 Supporting Documentation for a Native Vegetation Clearing Permit Application, July 2022.
- GMA (2024a) Clearing permit application form, CPS 9173/2, received 30 August 2024.
- GMA (2024b) GMA Mining Australia CPS 9173/1 Documentation for a Native Vegetation Clearing Permit Amendment Application. Report prepared by GMA Garnet Pty Ltd, 2024.
- Government of Western Australia (2019) 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions. <https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics>

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68) Atlas of Australian Soils, Sheets 1 to 10, with explanatory data. CSIRO and Melbourne University Press: Melbourne.

## 4. Glossary

### Acronyms:

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

### Definitions:

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

#### T Threatened species:

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

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

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

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

#### CR **Critically endangered species**

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

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

#### EN **Endangered species**

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

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

**VU**

**Vulnerable species**

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

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

**Extinct Species:**

**EX**

**Extinct species**

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

**EW**

**Extinct in the wild species**

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

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

**Specially protected species:**

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

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

**MI**

**Migratory species**

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

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

**CD**

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

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

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

**OS**

**Other specially protected species**

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

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

**P**

**Priority species:**

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

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

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

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

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

- P1 Priority One - Poorly-known species – known from few locations, none on conservation lands**  
Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, for example, agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation.
- Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements for threatened listing and appear to be under immediate threat from known threatening processes. These species are in urgent need of further survey.
- P2 Priority Two - Poorly-known species – known from few locations, some on conservation lands**  
Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, for example, national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation.
- Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements for threatened listing and appear to be under threat from known threatening processes. These species are in urgent need of further survey.
- P3 Priority Three - Poorly-known species – known from several locations**  
Species that are known from several locations and the species does not appear to be under imminent threat or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat.
- Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. These species need further survey.
- P4 Priority Four - Rare, Near Threatened and other species in need of monitoring**  
(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These species are usually represented on conservation lands.  
(b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as a conservation dependent specially protected species.  
(c) Species that have been removed from the list of threatened species or lists of conservation dependent or other specially protected species, during the past five years for reasons other than taxonomy.  
(d) Other species in need of monitoring.

#### **Principles for clearing native vegetation:**

- (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.
- (b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna.
- (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.
- (d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.
- (e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.
- (f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.
- (g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.
- (h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.
- (i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.
- (j) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.