

Clearing Permit Decision Report

1. Application details and outcomes

1.1. Permit application details

Permit number:	8825/2
Permit type:	Purpose Permit
Applicant name:	GMA Garnet Pty Ltd
Application received:	17 January 2025
Application area:	25.161 hectares
Purpose of clearing:	Mineral production and associated activities
Method of clearing:	Mechanical Removal
Tenure:	Mining Lease 70/204
Location (LGA area/s):	Shire of Northampton
Colloquial name:	Lynton Mine Expansion

1.2. Description of clearing activities

GMA Garnet Pty Ltd proposes to clear up to 25.161 hectares of native vegetation within a boundary of 25.161 hectares, for the purpose of mineral production and associated activities. The project is located approximately 3.5 kilometres north east of Port Gregory, within the Shire of Northampton.

Clearing permit CPS 8825/1 was granted by the Department of Mines, Industry Regulation and Safety (now the Department of Mines, Petroleum and Exploration) on 23 April 2020 and was valid from 16 May 2020 to 15 May 2030 and allowed clearing to occur only until 15 May 2025. The permit authorised the clearing of up to 25.161 hectares of native vegetation within a boundary of 25.161 hectares, for the purpose of mineral production and associated activities.

On 17 January 2025, the permit holder applied to amend CPS 8825/1 to increase the approved clearing limit by approximately 4.6 hectares and the clearing area by 2.6 hectares extend the permit duration, and to extend the period in which clearing is authorised. After consultation between the applicant and the Environmental Officer, it was determined that only the extension of duration would be an appropriate amendment for this permit and the increase in clearing area of the permit would need a new permit application.

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	4 August 2025
Decision area:	25.161 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 Mines, Petroleum and Exploration (DMPE) advertised the application for a public comment for a period of 7 days, and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (Appendix A), relevant datasets (Appendix E), supporting information provided by the applicant, including the results of a flora and vegetation survey (Appendix D), the clearing principles set out in Schedule 5 of the EP Act (Appendix B), proposed avoidance and minimisation measures (Section 3.1), relevant planning instruments and any other matters considered relevant to the assessment (Section 3.3).

The assessment identified that the proposed clearing may result in:

- 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 significant as a remnant of native vegetation in an area that has been extensively cleared; and
- potential land degradation in the form of wind and water 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
- retain cleared vegetation and topsoil and respread this on a cleared area within 12 months of completing operations to ensure fauna habitat is not permanently lost.

2. Legislative context

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

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

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

Other legislation of relevance for this assessment include:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Biosecurity and Agriculture Management Act 2007* (BAM Act)
- *Conservation and Land Management Act 1984* (WA) (CALM Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
- *Mining Act 1978* (WA)
- *Rights in Water and Irrigation Act 1914* (RIWI Act)

Relevant agreements (treaties) considered during the assessment include:

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

The key guidance documents which inform this assessment are:

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

3. Detailed assessment of application

3.1. Avoidance and mitigation measures

The supporting document submitted by the applicant, indicated that a 100 metre buffer has been implemented around the Osprey (*Pandion cristatus*) nesting site to ensure clearing will not impact it (GMA, 2024). Additionally, the clearing area will be rehabilitated as per Mine Closure requirements under the *Mining Act 1978* (GMA, 2024), and a rehabilitation condition will be retained in the amended clearing permit.

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

The total area cleared in the application area to date is 17.03 hectares, and 1.31 hectares have been rehabilitated and maintained (GMA, 2024). The proposed clearing may be at variance to principles (e) and (g) and is not likely to be at variance to any of the remaining clearing principles.

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 8825/1. The Delegated Officer determined that the proposed extension of duration is not likely to lead to an unacceptable risk to environmental values.

3.2.1. Significant remnant vegetation (remnant vegetation) - Clearing Principle (e)

Assessment

The application area falls within the Geraldton Sandplains Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 44 per cent 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 application area is broadly mapped as Beard vegetation association 371: Low forest; *Acacia rostellifera* (GIS Database). Approximately 10 per cent 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 (2020a) 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, 2020a). Approximately 83-88 per cent of the pre-European extent of vegetation association 17 remains uncleared at the state, bioregional and subregional level (Government of Western Australia, 2019).

The application area forms part of an ecological linkage running north-west to south-east with Hutt Lagoon to the east and large areas of cleared farmland to the west (GIS Database).

Conclusion

The proposed clearing will not reduce the extent of the 'Vulnerable' Beard vegetation association 371. The proposed clearing partially disrupts the linkage and exposes the remaining vegetation to increased edge effects.

Condition

Potential impacts to the adjacent remnant vegetation as a result of the proposed clearing may be minimised by the implementation of a weed management condition, staged clearing condition and rehabilitation condition.

3.3. Relevant planning instruments and other matters

The clearing permit amendment application was advertised on 6 June 2025 by the Department of Mines, Petroleum and Exploration 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 registered determined by the Federal Court on behalf of the claimant group (Yamatji Nation). 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 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 located within the Geraldton Sandplains bioregion and Geraldton Hills subregion as described by the Interim Biogeographic Regionalisation of Australia (IBRA). It 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 to the east and there are also some adjacent areas of garnet mining in the surrounding area (GIS Database).
Ecological linkage	The proposed clearing area contributes to an ecological linkage between areas on the dune system to the east and the coastal plain to the west (GIS Database).
Conservation areas	There are no conservation areas located within the application area (GIS Database). Nearby conservation areas include the Hutt Lagoon (non-perennial Lake), a wetland of national importance, which is located approximately 150 metres west of the application area (GIS Database). The nearest DBCA managed land is the Utcha Well Nature Reserve which is located approximately 7.6 kilometres north-west of the broader application area (GIS Database).
Vegetation description	<p>The vegetation of the application area is broadly mapped as the following Beard vegetation association: 371: Low forest; <i>Acacia rostellifera</i> (GIS Database); 17: Shrublands; <i>Acacia rostellifera</i> <i>thicket</i>. This vegetation association is more closely associated with the mapped vegetation type described below (VT01) than vegetation association 371 is (GHD, 2020a).</p> <p>A flora and vegetation survey was conducted over the application area by GHD Pty Ltd during December, 2019. The following vegetation types were recorded within the application area (GHD, 2020a):</p> <ul style="list-style-type: none"> VT01 – <i>Acacia rostellifera</i> open woodland to woodland: <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. Previously disturbed through historic clearing and heavily disturbed by grazing.
Vegetation condition	<p>The vegetation survey (GHD, 2020a) and aerial imagery indicate the vegetation within the proposed clearing area is in Degraded to Completely Degraded (Keighery, 1994) condition.</p> <p>The full Keighery (1994) condition rating scale is provided in Appendix C. Photos of vegetation are available in Appendix D.</p>
Climate	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 403.3 millimetres (BoM, 2025).
Soil description	The soils within the application area are mapped as calcareous shallow sand and red shallow sand (DPIRD, 2025).
Land degradation risk	The amendment areas are located in the Tamala North 2 subsystem which is moderately susceptible to water and wind erosion (DPIRD, 2025).
Waterbodies	The desktop assessment and aerial imagery indicated that no watercourses transect the area proposed to be cleared (GIS Database). Hutt Lagoon (non-perennial Lake), a wetland of national importance, is located approximately 300 metres west of the application area (GIS Database).
Hydrogeography	The application area is not mapped within a proclaimed Public Drinking Water Source Area (GIS Database). The proposed area is located within Gascoyne Groundwater Area which has a mapped groundwater salinity of 1,000-3,000 milligrams per litre total dissolved solids which is described as brackish water quality (GIS Database).
Flora	No Threatened or Priority flora species were recorded within the application area (GDH, 2020a).
Ecological communities	The application area is not located within any known or mapped Threatened or Priority Ecological Communities (GHD, 2020a; GIS Database). The Kalbarri Ironstone Community is mapped within 7.8 kilometres of the proposed application area (GIS Database).
Fauna	There are no records of conservation significant fauna species located within the application area (GIS Database).
Fauna habitat	<p>A fauna survey was conducted over the application area by GHD Pty Ltd during December, 2019. The following fauna habitat was recorded within the application area (GHD, 2020a):</p> <p>Acacia woodlands: This habitat type was recorded over the majority of the survey area and associated with lower and middle slopes on brown to orange sands. The vegetation type comprises <i>Acacia rostellifera</i> over chenopod shrubs (<i>Rhagodia preissii</i> subsp. <i>obovata</i>) and other mixed low shrubs, native and introduced grasses. The habitat contains a high level of wood and branches through previously cleared <i>Acacia</i> trees providing suitable habitat for reptiles and birds. There is evidence of high grazing impacts, including from feral pigs within this habitat type.</p>

A.2. Vegetation extent

	Pre-European area (ha)*	Current extent (ha)*	Extent remaining (%)*	Conservation Status**	Current extent in all DBCA Managed Land (proportion of pre-European extent) (%)*
IBRA Bioregion Geraldton Sandplains	3,136,037	1,404,424	~44	Depleted	18
IBRA Subregion Geraldton Hills	1,964,262	901,446	~45	Depleted	18
Local Government Shire of Northampton	1,258,428	930,228	~73	Least Concern	18
Beard vegetation associations - State					
Veg Assoc No. 371	32,816	3,499	~10	Vulnerable	0.74
Veg Assoc No. 17	76,633	67,605	~88	Least Concern	11
Beard vegetation associations - Bioregion					
Veg Assoc No. 371	32,807	3,499	~10	Vulnerable	0.74
Veg Assoc No. 17	54,078	45,159	~83	Least Concern	11
Beard vegetation associations - subregion					
Veg Assoc No. 371	32,807	3,499	~10	Vulnerable	0.74
Veg Assoc No. 17	49,605	42,016	~84	Least Concern	11

*Government of Western Australia (2019)

** Department of Natural Resources and Environment (2002)

A.3. Land degradation risk table

Risk categories	Land Unit 1
Wind erosion	M2: 30-50% of the map unit has a high to extreme wind erosion risk
Water erosion	M1: 10-30% of the map unit has a high to extreme water erosion risk
Salinity	L1: <3% of the map unit has a moderate or high salinity risk or is presently saline
Subsurface Acidification	M1: 10-30% of the map unit has a high subsurface acidification risk or is presently acid
Flood risk	L1: <3% of the map unit has a moderate to high flood risk
Water logging	L1: <3% of the map unit has a moderate to very high to risk
Phosphorus export risk	M2: 30-50% of the map unit has a high to extreme phosphorous export risk

(DPIRD, 2025)

Appendix B. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
<p><u>Principle (a):</u> "Native vegetation should not be cleared if it comprises a high level of biodiversity."</p> <p><u>Assessment:</u></p> <p>The vegetation of the application area was dominated by <i>Acacia rostellifera</i> woodland (GHD, 2020a). No Threatened or Priority Ecological Communities were identified as potentially occurring in the application area and none were identified during the field assessment (GHD, 2020a). The proposed clearing is not likely to significantly impact an area of higher biodiversity than surrounding areas, in either a local or regional context.</p>	<p>Not likely to be at variance</p> <p>(as per CPS 8825/1)</p>	No

Assessment against the clearing principles	Variance level	Is further consideration required?
<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>A nesting record of the Eastern Osprey (<i>Pandion cristatus</i>) was recorded less than 200 metres from the application area within the Acacia woodlands habitat, with the species utilising the nearby coastline and saline system of the Hutt Lagoon for foraging. The habitat type is considered very rarely used by other conservation significant species, such as the Peregrine Falcon and Fork-tailed Swift (GHD, 2020a) and it is unlikely to be significantly impacted by the requested extension of duration.</p>	<p>Not likely to be at variance</p> <p>(as per CPS 8825/1)</p>	No
<p><u>Principle (c):</u> “Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.”</p> <p><u>Assessment:</u></p> <p>The Threatened flora species <i>Caladenia bryceana</i> subsp. <i>cracens</i> (Northern Dwarf Spider Orchid) has been recorded approximately 262 metres west of the application area (GHD, 2020b). Suitable habitat for this species in the application area was considered extremely marginal (GHD, 2020a). It is unlikely the requested extension of duration would significantly impact this species or habitat needed for its survival.</p>	<p>Not likely to be at variance</p> <p>(as per CPS 8825/1)</p>	No
<p><u>Principle (d):</u> “Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community.”</p> <p><u>Assessment:</u></p> <p>The area proposed to be cleared does not form part of any known or mapped Threatened Ecological Community (GHD, 2020a; GIS Database).</p>	<p>Not likely to be at variance</p> <p>(as per CPS 8825/1)</p>	No
Environmental value: significant remnant vegetation and conservation areas		
<p><u>Principle (e):</u> “Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.”</p> <p><u>Assessment:</u></p> <p>Although Beard vegetation association 371 is mapped in the application area, ground-truthing vegetation survey (GHD, 2020a) identified vegetation type VT01 in the application area is more similar to vegetation association 17. The application area forms part on an informal ecological linkage (GIS Database).</p>	<p>May be at variance</p> <p>(as per CPS 8825/1)</p>	<p>Yes</p> <p>(See section 3.2.1)</p>
<p><u>Principle (h):</u> “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.”</p> <p><u>Assessment:</u></p> <p>Given the distance to the nearest conservation area (GIS Database), the proposed clearing is not likely to have an impact on the environmental values of any nearby mapped conservation areas.</p>	<p>Not likely to be at variance</p> <p>(as per CPS 8825/1)</p>	No
Environmental value: land and water resources		
<p><u>Principle (f):</u> “Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.”</p> <p><u>Assessment:</u></p> <p>Given no water courses or wetlands are recorded within the application area (GHD, 2020a; GIS Database). Hutt Lagoon (located approximately 300 metres west of the application area) is a non-perennial wetland listed in the Directory of Important Wetland in Australia as an important stop-over for migratory waterbirds and a good example of a coastal brine lake (DEC, 2009; GIS Database). The proposed clearing is not likely to significantly impact vegetation growing in, or in association with, an environment associated with a watercourse or wetland.</p>	<p>Not likely to be at variance</p> <p>(as per CPS 8825/1)</p>	No
<p><u>Principle (g):</u> “Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.”</p> <p><u>Assessment:</u></p> <p>The mapped soils in the application area are moderately susceptible to wind and water erosion (DPIRD, 2025; GIS Database). Noting the location of the application area, the proposed clearing is not likely to cause appreciable land degradation.</p>	<p>May be at variance</p> <p>(as per CPS 8825/1)</p>	No

Assessment against the clearing principles	Variance level	Is further consideration required?
Potential impacts from land degradation may be minimised by the continued implementation of a staged clearing condition.		
<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>Given no water courses, wetlands, or Public Drinking Water Source Areas are recorded within the application area (GHD, 2020a; GIS Database), the proposed clearing is unlikely to cause deterioration in the quality of surface or underground water.</p>	<p>Not likely to be at variance</p> <p>(as per CPS 8825/1)</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>Given no water courses or wetlands are recorded within the application area (GIS Database), the proposed clearing is unlikely to cause, or exacerbate, the incidence or intensity of flooding.</p>	<p>Not likely to be at variance</p> <p>(as per CPS 8825/1)</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.



Figure 1. VT01 – *Acacia rostellifera* open woodland to woodland (GHD, 2020a).



Figure 2. Acacia woodlands fauna habitat (GHD, 2020a).

E.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)
- Directory of Important Wetlands in Australia - Western Australia (DBCA-045)
- Groundwater Salinity Statewide (DWER-026)
- IBRA Vegetation Statistics
- Local Government Area (LGA) Boundaries (LGATE-233)
- Localities (LGATE-234)
- Native Title (Determination) (LGATE-066)
- Native Vegetation Extent (DPIRD-005)
- Pre-European Vegetation (DPIRD-006)
- Public Drinking Water Source Areas (DWER-033)
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Mapping - Best Available (DPIRD-027)
- Townsites (LGATE-248)
- 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)

E.2. References

- Bureau of Meteorology (BoM) (2025) Bureau of Meteorology Website – Climate Data Online, Lynton Station. Bureau of Meteorology. <https://reg.bom.gov.au/climate/data/> (Accessed 23 July 2025).
- Department of Environment and Conservation (DEC) (2009) Resource Condition Report for a Significant Western Australian Wetland - Hutt Lagoon. Department of Environment and Conservation, Perth, Western Australia
- 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 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 28 July 2025).
- Department of Primary Industries and Regional Development (DPIRD) (2025) NRInfo Digital Mapping. Department of Primary Industries and Regional Development. Government of Western Australia. <https://dpiird.maps.arcgis.com/apps/webappviewer/index.html?id=662e8cbf2def492381fc915aaf3c6a0f> (Accessed 23 July 2025).
- Department of Water and Environmental Regulation (DWER) (2021) Procedure: Native vegetation clearing permits. Joondalup. <https://www.wa.gov.au/system/files/2024-11/procedure-native-vegetation-clearing-permits.pdf>
- Environmental Protection Authority (EPA) (2016a) Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment. http://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/EPA%20Technical%20Guidance%20-%20Flora%20and%20Vegetation%20survey_Dec13.pdf
- Environmental Protection Authority (EPA) (2016b) Technical Guidance – Terrestrial Fauna Surveys. https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/Tech%20guidance-%20Terrestrial%20Fauna%20Surveys-Dec-2016.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

GHD (2020a) Lynton Mine Expansion Biological Survey. Prepared for GMA Garnet Pty Ltd by GHD Pty Ltd, February 2020.

GHD (2020b) Memorandum – Targeted Caladenia bryceana subsp. cracens survey and conservation listed flora survey of proposed haul road, September 2020.

GMA Garnet Pty Ltd (GMA) (2025) Clearing permit application for CPS 8825/2, received 17 January 2025.

GMA Mining Australia (GMA) (2024) Annual Clearing Permit Report 2024 CPS 3544/2, CPS 5947/3, CPS 7356/2, CPS 8819/2, CPS 8825/1, CPS 8860/1, CPS 9065/2, CPS 9172/1, CPS 9173/1, CPS 9707/3, CPS 10421/1 and CPS 10446/.

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.

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

Definitions:

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

Threatened species

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

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

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

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

CR Critically endangered species

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

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

EN Endangered species

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

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

VU Vulnerable species

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

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

Extinct species

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

EX Extinct species

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

EW Extinct in the wild species

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

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

Specially protected species

SP Specially protected species

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

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

MI Migratory species

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

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

CD Species of special conservation interest (conservation dependent fauna)

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

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

OS Other specially protected species

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

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

Priority species

P Priority species

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

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

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

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

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

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

Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, for example, agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation.

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

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

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

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

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

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

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

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

- (a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These species are usually represented on conservation lands.
- (b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as a conservation dependent specially protected species.
- (c) Species that have been removed from the list of threatened species or lists of conservation dependent or other specially protected species, during the past five years for reasons other than taxonomy.
- (d) Other species in need of monitoring.

Principles for clearing native vegetation:

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