



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 8819/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: GMA Garnet Pty Ltd

### 1.3. Property details

Property: Mining Lease 70/204  
Local Government Area: Shire of Northampton  
Colloquial name: Lynton Mine Expansion

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
21.056		Mechanical Removal	Mineral Production and Associated Activities

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 07 May 2020

## 2. Site Information

### 2.1. Existing environment and information

#### 2.1.1. Description of the native vegetation under application

**Vegetation Description** The vegetation of the application area is broadly mapped as the following Beard vegetation associations:  
17: Shrublands; *Acacia rostellifera* thicket; and  
371: Low forest; *Acacia rostellifera* (GIS Database).

A flora and vegetation survey was conducted over the application area and surrounding areas by GHD during December, 2019. The following vegetation association was recorded within the application area (GHD, 2020):

#### VT01 – *Acacia rostellifera* open woodland to woodland

*Acacia rostellifera* open woodland to woodland over *Rhagodia preissii* subsp. *obovata*, *Pimelea microcephala* subsp. *microcephala*, *Olearia* sp. Kennedy Range (G. Byrne 66) and *Stylobasium spathulatum* open shrubland over *Austrostipa elegantissima* and *\*Ehrharta longiflora* open grassland to grassland. Other common species include *Alyogyne hakeifolia*, *Roepora fruticulosa*, *Commicarpus australis* and *Euphorbia boophthona*. Occurs over lower and middle slopes on brown to orange sands.

Note: \* indicates introduced species

**Clearing Description** Lynton Mine Expansion.  
GMA Garnet Pty Ltd proposes to clear up to 21.056 hectares of native vegetation within a boundary of the same size, for the purpose of mineral production and associated activities. The project is located approximately six kilometres north of Port Gregory, within the Shire of Northampton.

**Vegetation Condition** Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).

To:

Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994).

**Comment** The vegetation condition was derived from a vegetation survey conducted by GHD (2020). The majority of the vegetation exists in Good condition, with the application area previously disturbed through historic clearing and by grazing, with a high cover of weeds present (GHD, 2020).

The proposed clearing is for garnet mineral sand mining and an expansion of the Lynton mine (GMA, 2020). The application area includes the extent of the ore body and access via haul roads (expansion of former drill lines previously rehabilitated) (GMA, 2020).

### 3. Assessment of application against Clearing Principles

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

##### Comments

##### **Proposal is not likely to be at variance to this Principle**

The clearing permit application area is located within the Geraldton Hills subregion of the Interim Biogeographic Regionalisation for Australia (IBRA) Geraldton Sandplains Bioregion (GIS Database). The Geraldton Hills subregion is characterised by proteaceous scrub-heath, rich in endemics, on the sandy earths of an extensive, undulating, and lateritic sandplain (CALM, 2002). York gum and jam woodlands occur on outwash plains associated drainage and valleys (CALM, 2002). Vegetation of the subregion is characterised by sand heaths with emergent *Banksia* and *Callitris*, york gum woodlands on alluvial plains, proteaceous heath and *Acacia* scrubs on limestones depending on depth of coastal-sand mantle, low closed forest of *Acacia rostellifera* on alluvial plains of the Greenough and Irwin River (CALM, 2002).

A reconnaissance flora and vegetation survey of the application area was conducted by GHD (2020) from 8-12 December 2019. The vegetation of the application area was dominated by *Acacia rostellifera* woodland (GHD, 2020). No Threatened or Priority Ecological Communities were identified as potentially occurring in the application area and none were identified during the field assessment (GHD, 2020).

A desktop assessment identified 455 flora species occurring within 10 kilometres of the application area (GHD, 2020). A total of 64 flora species representing 26 families and 50 genera were recorded within the application area and surrounding areas (GHD, 2020). The desktop assessment identified 48 conservation significant flora species within 10 kilometres of the application, however 45 of these were determined to be unlikely to occur due to a lack of suitable habitat within the application area (GHD, 2020). Three species were identified as possibly occurring due to the presence of suitable habitat, including *Anthocercis intricata* (P3), *Balladonia aervooides* (P3) and *Caladenia bryceana* subsp. *cracens* (T). None of these species were identified during the field survey, however the field survey was not conducted at an appropriate time to detect *Caladenia bryceana* subsp. *cracens* (T) (Department of Biodiversity, Conservation and Attractions [DBCA], 2020; GHD, 2020). Potential impacts to *Caladenia bryceana* subsp. *cracens* (T) can be minimised by the implementation of a condition that doesn't allowing clearing within 50 metres of potential habitat.

Fifteen species of weeds were recorded during the field survey of the application area and surrounding areas (GHD, 2020). None were listed as a Declared Pest according to the *Biosecurity and Agriculture Management Act 2007* (GHD, 2020). Weeds have the potential to out-compete native flora and reduce the biodiversity of an area. Potential impacts to biodiversity as a result of the introduction of weeds may be minimised by the implementation of a weed management condition.

Thirty-one fauna species were recorded within the survey area, including 21 birds, eight mammals and two reptiles (GHD, 2020). Of these, seven were introduced fauna species (GHD, 2020). A desktop assessment identified 35 conservation significant fauna species occurring within 10 kilometres of the application, however 32 of these were identified as unlikely to occur due to a lack of suitable habitat (GHD, 2020). The three species determined to be present or likely to occur included; osprey (*Pandion cristatus*, MI), fork-tailed swift (*Apus pacificus*, MI) and peregrine falcon (*Falco peregrinus*, OS) (GHD, 2020). During the field survey of the application area and surrounds an osprey nest was identified, however this existed outside of the application area (GHD, 2020; GMA, 2020). All species determined as likely to be present are highly mobile avian species and are unlikely to be significantly impacted by the proposed clearing.

The vegetation associations, fauna habitats and landform types present within the application area, are well represented in surrounding areas (GIS Database). The application area is unlikely to represent an area of higher biodiversity than surrounding areas, in either a local or regional context.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

##### Methodology

CALM (2002)  
DBCA (2020)  
GHD (2020)  
GMA (2020)

GIS Database:

- IBRA Australia
- Pre-European Vegetation
- Threatened and Priority Ecological Communities Boundaries
- Threatened and Priority Ecological Communities Buffers
- Threatened and Priority Flora
- Threatened Fauna

**(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 indigenous to Western Australia.**

**Comments Proposal is not likely to be at variance to this Principle**

One fauna habitat, *Acacia* woodlands, was recorded within the application area (GHD, 2020).

Three conservation significant fauna species were determined to be present or likely to occur within the application area due to the presence of suitable habitat including; osprey (*Pandion cristatus*, MI), fork-tailed swift (*Apus pacificus*, MI) and peregrine falcon (*Falco peregrinus*, OS) (GHD, 2020). During the field survey an osprey nest was identified within the *Acacia* woodlands habitat type, with the osprey likely to be utilising the nearby coastline and saline system of the Hutt Lagoon for foraging (GHD, 2020). However, the nest existed outside of the application area and the *Acacia* woodlands were the most extensive habitat type recorded within the application area and surrounding areas (GHD, 2020). Therefore, the application area is unlikely to represent habitat significant to the osprey.

The 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). The proposed clearing partially disrupts the linkage, however potential impacts to fauna habitat may be minimised by the implementation of a staged clearing condition and rehabilitation condition.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

**Methodology** GHD (2020)  
GMA (2020)

GIS Database:  
- Imagery  
- Pre-European Vegetation  
- Threatened Fauna

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

**Comments Proposal is not likely to be at variance to this Principle**

There are no known records of Threatened flora within the application area (GIS Database). Flora surveys of the application area did not record any species of Threatened flora (GHD, 2020).

Potential habitat for *Caladenia bryceana* subsp. *cracens* (T) exists adjacent to the application area (GHD, 2020). Advice from DBCA (2020) indicated that a 50 metre buffer from this habitat would be appropriate to ensure there are no detrimental impacts to Threatened flora, prior to targeted survey work being conducted. Potential impacts to the species can be minimised by the implementation of a condition that doesn't allow clearing within 50 metres of suitable habitat.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

**Methodology** DBCA (2020)  
GHD (2020)

GIS Database:  
- Pre-European Vegetation  
- Threatened and Priority 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.**

**Comments Proposal is not likely to be at variance to this Principle**

There are no known Threatened Ecological Communities (TECs) located within or in close proximity to the application area (GIS Database).

A flora and vegetation survey of the application area did not identify any TECs (GHD, 2020).

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

**Methodology** GHD (2020)

GIS Database:  
- Threatened and Priority Ecological Communities Boundaries  
- Threatened and Priority Ecological Communities Buffers

**(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.**

**Comments Proposal is not likely to be at variance to this Principle**

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 application area is broadly mapped as Beard vegetation associations 17: shrublands; *Acacia rostellifera* thicket; and 371: low forest; *Acacia rostellifera* (GIS Database). Approximately 83-88% of the pre-European extent of vegetation association 17 remains uncleared at the state, bioregional and subregional level (Government of Western Australia, 2019). 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 (GHD, 2020). Therefore the proposed clearing will not reduce the extent of Beard vegetation association 371.

The 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). The proposed clearing partially disrupts the linkage and exposes the remaining vegetation to increased edge effects. Potential impacts to the 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.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in DBCA managed lands (and post clearing %)
IBRA Bioregion – Geraldton Sandplains	3,136,037	1,404,424	~44	Depleted	18 (40)
IBRA Subregion – Geraldton Hills	1,964,262	901,446	~45	Depleted	18 (39)
Local Government – Northampton	1,258,428	930,228	~73	Least Concern	18 (24)
Beard vegetation associations – WA					
17	76,633	67,605	~88	Least Concern	11 (13)
371	32,816	3,499	~10	Vulnerable	0 (6)
Beard vegetation associations – Geraldton Sandplains Bioregion					
17	54,078	45,159	~83	Least Concern	11 (13)
371	32,807	3,499	~10	Vulnerable	0 (6)
Beard vegetation associations – Geraldton Hills subregion					
17	49,605	42,016	~84	Least Concern	11 (13)
371	32,807	3,499	~10	Vulnerable	0 (6)

\* Government of Western Australia (2019)

\*\* Department of Natural Resources and Environment (2002)

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

**Methodology** Department of Natural Resources and Environment (2002)  
Government of Western Australia (2019)  
GHD (2020)

GIS Database:  
- IBRA Australia  
- Pre-European Vegetation

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

**Comments Proposal is not likely to be at variance to this Principle**

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).

The application area is situated approximately 250 meters east of Hutt Lagoon at its closest point (GIS Database). Hutt Lagoon is a wetland listed in the Directory of Important Wetlands in Australia as an important stop-over for migratory waterbirds and a good example of a coastal brine lake (DEC, 2009; GIS Database). The existing garnet mine east of Hutt Lagoon is described as a threat to the ecology of Hutt Lagoon in DEC's Resource Condition Report because of its potential to alter the hydrology and water quality of Hutt Lagoon if not managed properly (DEC, 2009). The threats of the garnet operations are focussed on operational aspects of groundwater use with groundwater draw down potentially causing a seawater intrusion and impacting nearby Utcha Swamp (DEC, 2009). Groundwater management during operations is assessed in the Mining Proposal under the *Mining Act 1978*. Any potential impacts of the proposed clearing to the adjacent vegetation of Hutt Lagoon may be reduced by the implementation of staged clearing and rehabilitation conditions.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

**Methodology** DEC (2009)  
GHD (2020)

GIS Database:  
- Hydrography, Lakes  
- Hydrography, linear

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

**Comments Proposal may be at variance to this Principle**

The application area has been mapped as Map Unit 231TA\_2 of the Tamala North 2 Subsystem (DPIRD, 2020). Map Unit 231TA\_2 is described as dune crests and coastal hills with plains and gentle hillslopes consisting of low hills with relic dunes and some limestone outcrops (DPIRD, 2020). Soils consist of brown calcareous shallow sands and red shallow sand (DPIRD, 2020). This Map Unit has a high risk of eutrophication and wind erosion if cleared of vegetation (DPIRD, 2020).

Based on the above, the proposed clearing may be at variance to this Principle. Potential land degradation impacts as a result of the proposed clearing may be minimised by the implementation of a staged clearing condition and rehabilitation condition.

Based on the above, the proposed clearing may be at variance to this Principle.

**Methodology** DPIRD (2020)

**(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.**

**Comments Proposal is not likely to be at variance to this Principle**

There are no conservation areas in the vicinity of the application area. The nearest DBCA (formerly DPaW) managed land is the Utcha Well Nature Reserve which is located approximately four kilometres north-west of the application area (GIS Database). The proposed clearing is unlikely to impact on the environmental values of any conservation area.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

**Methodology** GIS Database:  
- DPaW Tenure

**(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.**

**Comments Proposal is not likely to be at variance to this Principle**

There are no Public Drinking Water Source Areas within or in close proximity to the application area (GIS Database). There are no permanent watercourses or wetlands within the area proposed to clear (GIS Database). 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 (GHD, 2020). The proposed clearing is unlikely to result in significant changes to surface water flows. The proposed clearing is unlikely to cause deterioration in the quality of underground water.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

**Methodology GHD (2020)**

GIS Database:

- Hydrography, Linear
- Public Drinking Water Source Areas

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

**Comments Proposal is not likely to be at variance to this Principle**

The climate of the subregion is warm semi-arid to Mediterranean, with an average rainfall of approximately 400-500 millimetres per year (CALM, 2002). The nearest weather station is Geraldton Town, approximately 80 kilometres south south-east of the application area, with an average rainfall of approximately 445.8 millimetres per year (BoM, 2020). The application area occurs on sandy soils so any rainfall is likely to rapidly infiltrate through the porous sand and limestone (GMA, 2020). There are no permanent water courses or waterbodies within the application area (GIS Database). The proposed clearing is unlikely to increase the incidence or intensity of natural flooding events.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

**Methodology BoM (2020)  
CALM (2002)  
GMA (2020)**

GIS Database:

- Hydrography, linear

**Planning Instrument, Native Title, previous EPA decision or other matter.**

**Comments**

The clearing permit application was advertised on 2 March 2020 by the Department of Mines, Industry Regulation and Safety (DMIRS), inviting submissions from the public. No submissions were received in relation to this application.

There is one native title claim (WC2000/001) over the area under application (DPLH, 2020). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. 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, 2020). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

It is 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.

**Methodology DPLH (2020)**

## 4. References

- BoM (2020) Bureau of Meteorology Website – Climate Data Online, Geraldton Town. Bureau of Meteorology. <http://www.bom.gov.au/climate/data/> (Accessed 20 April 2020).
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- DBCA (2020) Advice received in relation to Clearing Permit Application CPS 8819/1. Species and Communities Branch, Department of Biodiversity, Conservation and Attractions, Western Australia, April 2020.
- DEC (2009) Resource Condition Report for a Significant Western Australian Wetland - Hutt Lagoon. Department of Environment and Conservation, Perth, Western Australia
- 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.
- DPIRD (2020) Advice received in relation to Clearing Permit Application CPS 8819/1. Commissioner of Soil and Land Conservation, Department of Primary Industries and Regional Development, Western Australia, April 2020.
- DPLH (2020) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <http://maps.daa.wa.gov.au/AHIS/> (Accessed 3 April 2020).
- GHD (2020) Lynton Mine Expansion Biological Survey. Report prepared by GHD Pty Ltd for GMA Garnet Pty Ltd, February 2020.
- GMA (2020) GMA Mining Australia Mining Tenement M70/204 Supporting Documentation for Native Vegetation Clearing Permit Application. Report prepared by GMA Garnet Pty Ltd, February 2020.
- 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, Perth. <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.

## 5. Glossary

### Acronyms:

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

## **Definitions:**

{DBCA (2019) 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 that subset of 'Specially Protected Fauna' listed under schedules 1 to 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for Threatened Fauna.

**Threatened flora** is that subset of 'Rare Flora' listed under schedules 1 to 3 of the *Wildlife Conservation (Rare Flora) Notice 2018* for Threatened Flora.

The assessment of the conservation status of these species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria as detailed below.

### **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. Published under schedule 1 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for critically endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for critically endangered flora.

### **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. Published under schedule 2 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for endangered flora.

### **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. Published under schedule 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for vulnerable fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for vulnerable flora.

## **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).

Published as presumed extinct under schedule 4 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for extinct fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for extinct flora.

### **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. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.

## **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).

Includes birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and 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.

Published as migratory birds protected under an international agreement under schedule 5 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

**CD**

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

Fauna of special conservation need being species 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).

Published as conservation dependent fauna under schedule 6 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

**OS**

**Other specially protected species**

Fauna 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).

Published as other specially protected fauna under schedule 7 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

**P**

**Priority species:**

Possibly threatened species that do not meet survey criteria, 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 priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora.

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

Assessment of Priority codes 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**

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, e.g. 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 and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.

**P2**

**Priority Two - Poorly-known species**

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, e.g. 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 and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.

**P3**

**Priority Three - Poorly-known species**

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. Such species are in need of 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 Conservation Dependent.

(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.