



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 8772/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Habrok (Battler Pit) Pty Ltd

### 1.3. Property details

Property: Mining Lease 77/1285  
Local Government Area: Shire of Yilgarn  
Colloquial name: Battler Gold Project

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
14.8		Mechanical Removal	Waste Rock Landform and Topsoil Stockpile Extension

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 13 February 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 association: 1068: Medium woodland; salmon gum, morrel, gimlet and *Eucalyptus sheathiana* (GIS Database).

A flora and vegetation survey was conducted over the application area by Western Botanical during 29 September to 1 October and 21 to 23 October 2015. The vegetation survey identified the following four vegetation associations in the application area and surrounding areas (Western Botanical, 2016):

1. *Eucalyptus longicornis* dominated woodland - *Eucalyptus longicornis*, *Eucalyptus salubris* and *Eucalyptus calycogona* subsp. *calycogona* open woodland from 6 to 15 metres over *Melaleuca pauperiflora* subsp. *fastigiata* and *Santalum acuminatum* sparse tall shrubland from 3 to 4 metres over *Eremophila scoparia*, *Atriplex vesicaria* and *Atriplex bunburyana* open shrubland from 0.6 to 1.5 metres over *Maireana georgei*, *Enchylaena tomentosa* and *Roepera* species sparse low shrubland;
2. *Eucalyptus salubris* dominated woodland - *Eucalyptus salubris*, *Eucalyptus calycogona* subsp. *calycogona* and *Eucalyptus longicornis* open woodland from 6 to 15 metres over *Exocarpos aphyllus* and *Atriplex nummularia* isolated shrubs from 2 to 3 metres over *Atriplex vesicaria*, *Ptilotus exaltatus* and *Roepera apiculata* (with *Acacia erinacea*, *Acacia merrallii*, *Acacia intricata* in southern areas) sparse shrubland;
3. *Eucalyptus loxophleba* and *Acacia acuminata* drainage shrubland - Emergent *Eucalyptus loxophleba* subsp. *lissophloia* (6 to 10 metres) over *Acacia acuminata* (3 to 4 metres) tall shrubland over *Beyeria sulcata*, *Alyxia buxifolia*, *Philotheca brucei* open shrubland (2 to 3 metres), over a very sparse ground layer of *Podolepis lessonii* and *Trachymene cyanopetala*; and
4. Mixed *Eucalyptus* and *Acacia acuminata* shrubland - *Eucalyptus corrugata*, *Eucalyptus yilgarnensis*, and *Eucalyptus oleosa* subsp. *oleosa* open woodland (6 to 10 metres) over *Acacia acuminata* (3 to 4 metres) tall shrubland over *Hybanthus floribundus*, *Beyeria sulcata*, *Trymalium myrtillus* subsp. *myrtillus* shrubland (0.6 to 2.5 metres) over *Lepidosperma* aff. *fimbriatum* sparse sedgeland.

The majority of the application area comprised the *Eucalyptus longicornis* dominated woodland and *Eucalyptus salubris* dominated woodland.

**Clearing Description** Battler Gold Project.  
Habrok (Battler Pit) Pty Ltd proposes to clear up to 14.8 hectares of native vegetation within a boundary of the same size, for the purpose of a waste rock landform and topsoil stockpile extension. The project is located approximately 14 kilometres south-southeast of Southern Cross, within the Shire of Yilgarn.

**Vegetation Condition** Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).

To:

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).

**Comment**

The vegetation condition was derived from a vegetation survey conducted by Western Botanical (2016). The application area and surrounds have been previously disturbed by historical gold prospecting, exploration, mining and ore processing (CDM Smith Australia, 2019).

The proposed clearing is for the expansion of current operations to allow for higher volumes of waste rock and an extension of the western and eastern waste rock landforms, as well as associated topsoil stockpiles (CDM Smith Australia, 2019).

### 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 Southern Cross subregion of the Interim Biogeographic Regionalisation for Australia (IBRA) Coolgardie Bioregion (GIS Database). The Southern Cross subregion is characterised by subdued relief, comprising gently undulating uplands dissected by broad valleys with bands of low greenstone hills (CALM, 2002). Diverse *Eucalyptus* woodlands (*Eucalyptus salmonophloia*, *Eucalyptus salubris*, *Eucalyptus transcontinentalis*, *Eucalyptus longicornis*) rich in endemic eucalypts occur around salt lakes, on the low greenstone hills, valley alluvials and broad plains of calcareous earths (CALM, 2002). The granite basement outcrops at mid-levels in the landscape and supports swards of *Borya constricta*, with stands of *Acacia acuminata* and *Eucalyptus loxophleba* (CALM, 2002). Upper levels in the landscape are the eroded remnants of a lateritic duricrust yielding yellow sandplains, gravelly sandplains and laterite breakaways supporting mallees (*Eucalyptus leptopoda*, *Eucalyptus platycorys* and *Eucalyptus scyphocalyx*) and scrub-heaths (*Allocasuarina corniculata*, *Callitris preissii*, *Melaleuca uncinata* and *Acacia beauverdiana*) (CALM, 2002).

The application area falls within the area known as the Great Western Woodlands, which represents the largest and most intact eucalypt woodland remaining in southern Australia and is one of the best examples of its type in the world (DEC, 2010). The Great Western Woodlands covers a total area of approximately 16 million hectares, and is recognised for its flora and fauna species richness and high number of endemic flora species (DEC, 2010). However, at approximately 14.8 hectares in size, the clearing permit application area represents less than 0.001% of the area covered by the Great Western Woodlands, and the proposed clearing is unlikely to have any significant impact on the conservation values of the Great Western Woodlands.

A vegetation assessment of the application area was conducted by Western Botanical (2016) during 29 September to 1 October and 21 to 23 October 2015 (Western Botanical, 2016). The vegetation of the application area and surrounding areas was dominated by *Eucalyptus longicornis*, *Eucalyptus salubris* and *Eucalyptus calycogona* subsp. *calycogona* open woodlands (Western Botanical, 2016). Vegetation types described within the application area were all represented in surrounding areas, indicating a wider distribution. No Threatened or Priority Ecological Communities were identified as potentially occurring in the application area and the field assessment of the application did not record any (Western Botanical, 2016; GIS Database).

A total of 36 families, 92 genera and 140 flora species were recorded during the field assessment of the application area and surrounding areas (Western Botanical, 2016). A desktop assessment identified two Threatened species, *Eucalyptus crucis* subsp. *crucis* and *Daviesia microcarpa*, and 20 Priority flora species that had been recorded within a 20 kilometre radius of the application area (Western Botanical, 2016). Of these, five Priority species were identified within the application area and surrounding areas by Western Botanical (2016) during the field assessment; *Goodenia heatheriana* (P1), *Hemigenia* sp. Newdegate (E. Bishop 75) (P1), *Hydrocotyle corynophora* (P1), *Gnephosis intonsa* (now *Notisia intonsa*) (P3) and *Phlegmatospermum eremaeum* (P3). In addition, one species of interest (due to unresolved taxonomy) was also recorded, *Lepidosperma* aff. *fimbriatum* (Western Botanical, 2016). The majority of these species, with the exception of *Notisia intonsa* (P3), were not recorded within the application area (Western Botanical, 2016). *Notisia intonsa* (P3) is known to occur across five IBRA regions and is not restricted locally (Western Australian Herbarium, 1998-). The proposed clearing includes the clearing of approximately 25 individuals, this represents 0.05% of the local population (with 4,325 of the total 54,510 individuals previously cleared under CPS 7056/1) (CDM Smith Australia, 2019; Western Botanical, 2016). The proposed clearing is unlikely to have a significant impact on the conservation status of this species.

Sixteen species of weeds were recorded during the field assessment of the application area and surrounding areas, however none were declared pest species or listed weeds of national significance (Western Botanical, 2016). 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.

A desktop fauna assessment identified seven species of amphibians, 69 reptile species, 99 bird species and 29 mammal species that could potentially occur in the application area, including 12 conservation significant species (Terrestrial Ecosystems, 2016). Of the conservation significant fauna potentially occurring, the majority were determined to be unlikely to be present due to a lack of suitable habitat. However, the western rosella, *Platycercus icterotis xanthogenys* (P4), fork-tailed swift, *Apus pacificus* (MI) and peregrine falcon, *Falco peregrinus* (OS) may infrequently be found in the vicinity of the application area (Terrestrial Ecosystems, 2016). Chuditch, *Dasyurus geoffroii* (VU) may possibly be present in the area in very low numbers (Terrestrial Ecosystems, 2016). Malleefowl, *Leipoa ocellata* (VU) may potentially forage in the area, however the majority

of the application area and surrounding area was found to be unsuitable habitat, lacking dense understorey to provide necessary protection (Terrestrial Ecosystems, 2016). Given the size of the proposed disturbance and the mobile nature of the conservation significant fauna potentially present, it is unlikely that the proposed clearing will have a significant impact on conservation significant fauna species.

During the reconnaissance fauna survey, hand searching was conducted for Short Range Endemic (SRE) invertebrates, with two spiders recovered which were identified as being from the *Aname* genus (Terrestrial Ecosystems, 2016). This genus is relatively abundant in the vicinity of the application area and is unlikely to be a SRE species (Terrestrial Ecosystems, 2016). Therefore, it is unlikely that the proposed clearing will have a significant impact on SRE species.

The vegetation associations, fauna habitats and landform types present within the application area, are well represented in surrounding areas (CDM Smith Australia, 2019; 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)  
CDM Smith Australia (2019)  
DEC (2010)  
Terrestrial Ecosystems (2016)  
Western Botanical (2016)  
Western Australian Herbarium (1998-)

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**

The fauna habitat present within the application area was described as Eucalypt woodlands over an understorey of shrubs on mostly flat or gently undulating areas, with variable levels of leaf litter (Terrestrial Ecosystems, 2016). There is previous disturbance within the area from historical gold prospecting, exploration, mining and ore processing, however the majority of the vegetation exists in relatively good condition (CDM Smith Australia, 2019; GIS Database). The fauna habitat within the application area is not restricted locally or regionally (GIS Database).

The majority of the conservation significant species with the potential to occur in the area were considered unlikely to be present due to a lack of suitable habitat within the application area (Terrestrial Ecosystems, 2016). The remaining species that may utilise suitable habitat within the application area are highly mobile and are unlikely to be dependent on habitat within the application area.

The area proposed to be cleared is unlikely to represent a significant habitat for fauna in a local or regional context.

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

**Methodology** CDM Smith Australia (2019)  
Terrestrial Ecosystems (2016)

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). A flora survey of the application area and surrounding areas did not record any species of Threatened flora (Western Botanical, 2016).

The vegetation associations within the application area are common and widespread within the region (Western Botanical, 2016; GIS Database), and the vegetation proposed to be cleared is unlikely to be necessary for the continued existence of any species of Threatened (rare) flora.

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

**Methodology** Western Botanical (2016)

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 (Western Botanical, 2016).

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

**Methodology** Western Botanical (2016)

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 at variance to this Principle**

The application area falls within the Coolgardie Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 97% of the pre-European vegetation still exists in the IBRA Coolgardie Bioregion (Government of Western Australia, 2019). The application area is broadly mapped as Beard vegetation association 1068: Medium woodland; salmon gum, morrel, gimlet and *Eucalyptus sheathiana* (GIS Database). Approximately 52-54% of the pre-European extent of each of this vegetation association remains uncleared at both the state and bioregional level (Government of Western Australia, 2019). The application area exists within a linear belt of remnant vegetation approximately 25 kilometres by 3.5 kilometres that runs along the eastern side of the Southern Cross to Marvel Loch Road (Terrestrial Ecosystems, 2016; GIS Database). However, the proposed clearing of 14.8 hectares within the remnant vegetation does not significantly reduce its value. Therefore, the application area does not represent a significant remnant of native vegetation in an area that has been extensively cleared.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in DBCA managed lands
IBRA Bioregion – Coolgardie	12,912,204	12,648,491	~97	Least Concern	~16
Beard vegetation associations – WA					
1068	268,900	142,088	~52	Least Concern	~6
Beard vegetation associations – Coolgardie Bioregion					
1068	193,988	104,804	~54	Least Concern	~7

\* Government of Western Australia (2019)

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

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

**Methodology** Department of Natural Resources and Environment (2002)  
Government of Western Australia (2019)  
Terrestrial Ecosystems (2016)

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 (GIS Database). One seasonal creek line passes through the application area (GIS Database). However, Western Botanical (2016) did not identify any vegetation growing in, or in association with, an environment associated with a watercourse or wetland.

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

**Methodology**      Western Botanical (2016)

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 is not likely to be at variance to this Principle**  
The application area has been mapped as Greenmount 3 subsystem 261 Gr\_3 and are described as rolling hills with red loamy earth and clay soils supporting eucalypt woodland (possibly *Eucalyptus salmonophloia* and *Eucalyptus loxophleba*) (DPIRD, 2020). Land slopes are likely to range from nearly level to about 3.5% and are not inherently prone to soil erosion (DPIRD, 2020). Clearing of protective vegetative cover may render them prone to accelerated soil erosion, especially where surface water run-off is not appropriately managed (DPIRD, 2020).

The proposed clearing of up to 14.8 hectares of native vegetation within a boundary of the same size, for the purpose of an extension to an already existing waste rock landform and topsoil stockpile is unlikely to cause appreciable land degradation.

Based on the above, the proposed clearing is not likely to 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 Wockallary Nature Reserve which is located approximately 15 kilometres south-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). 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**      GIS Database:  
- Hydrography, Linear

**(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 region is arid to semi-arid Warm Mediterranean, with approximately 250-300 millimetres of mainly winter rainfall per year (CALM, 2002). The nearest weather station is Southern Cross Airfield, approximately 12 kilometres north of the application area, with an average rainfall of approximately 302.2 millimetres per year (BoM, 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)

GIS Database:  
- Hydrographic Catchments - Catchments  
- Hydrography, linear

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

**Comments**

The clearing permit application was advertised on 6 January 2020 by the Department of Mines, Industry Regulation and Safety (DMIRS), inviting submissions from the public. One submission was received in relation to this application, concerning the reduced vegetative buffer and increased visibility of operations from the Southern Cross – Marvel Loch Road. Habrok (Battler Pit) Pty Ltd has commenced consultation with the Shire of Yilgarn to ensure the community is kept informed of developments, and visual amenity and stakeholder engagement will be considered under *Mining Act 1978* approvals.

There is one native title claim (WC2017/007) 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, Southern Cross Airfield. Bureau of Meteorology. <http://www.bom.gov.au/climate/data/> (Accessed 17 January 2020).
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- CDM Smith Australia (2019) Battler Gold Project Native Vegetation Clearing Permit Support Document. Report prepared for Habrok (Battler Pit) Pty Ltd, December 2019.
- DEC (2010) A Biodiversity and Cultural Conservation Strategy for the Great Western Woodlands. Department of Environment and Conservation, 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 8772/1. Commissioner of Soil and Land Conservation, Department of Primary Industries and Regional Development, Western Australia, January 2020.
- DPLH (2020) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <http://maps.daa.wa.gov.au/AHIS/> (Accessed 17 January 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.
- Terrestrial Ecosystems (2016). Level 1 Fauna Risk Assessment for the Battler Project Area. Prepared for Bioscope Environmental, April 2016.
- Western Australian Herbarium (1998-) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions. <https://florabase.dpaw.wa.gov.au/> (Accessed 17 January 2020).
- Western Botanical (2016). Flora Survey of Battler Tenements M77/166 & P77/3645 (Level 1 Assessment and Targeted Searches). Prepared for IMD Gold Mines Ltd and Bioscope Environmental, February 2016.

## 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.