

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 9323/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Resource Mining Pty Ltd

1.3. Property details

Property: Mining Lease 29/420
Miscellaneous Licence 29/109
Local Government Area: Shire of Menzies
Colloquial name: Goongarrie Lady Project

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 29 July 2021

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description Beard vegetation associations have been mapped for the whole of Western Australia. Three Beard vegetation associations have been mapped within the application area (GIS Database).

20: Low woodland; mulga mixed with *Allocasuarina cristata* and *Eucalyptus* sp;
125: Bare areas; salt lakes; and
480: Succulent steppe with open low woodland; mulga and sheoak over salt bush.

A flora and vegetation survey was undertaken over an area of approximately 255 hectares, which included the application area and surrounding areas, on 20 November 2016 by Botanica Consulting (2017). The following eight vegetation communities were identified within the survey area, associated with four landform types:

Clay-Loam Plain

Casuarina Forests and Woodlands (MVG 8)

CLP-CFW1: Low woodland of *Casuarina pauper* over open shrubland of *Acacia burkittii* *Acacia hemiteles*/
Dodonaea lobulata and open tussock grassland of *Enteropogon ramosus*/
Eragrostis eriopoda on clay loam plain.

Eucalypt Woodlands (MVG 5)

CLP-EW1: Low open woodland of *Eucalyptus clelandii* over open shrubland of *Acacia kempeana* /
Acacia burkittii and open chenopod shrubland of *Atriplex* spp. on clay loam plain.

Mallee Woodlands and Shrublands (MVG 14)

CLP-MWS1: Mid open mallee woodland of *Eucalyptus celastroides* over mid open shrubland of *Cratystylis subspinescens*/
Dodonaea viscosa/
Eremophila scoparia and low open shrubland of *Atriplex vesicularis*/
Frankenia setosa on clay loam plain.

Closed Depression

Casuarina Forests and Woodlands (MVG 8)

CD-CFW1: Low open woodland of *Casuarina pauper* over open shrubland of *Cratystylis subspinescens* and open chenopod shrubland of *Atriplex* spp. in closed depression.

Chenopod Shrublands, Samphire Shrublands and Forblands (MVG 22)

CD-CSSSF1: Mid sparse chenopod shrubland of *Maireana glomerifolia* over samphire shrubland of *Tecticornia halocnemoides* and open forbland of *Disphyma crassifolium* in playa.

Dune

Casuarina Forests and Woodlands (MVG 8)

D-CFW1: Open low woodland of *Casuarina pauper* over open shrubland of *Acacia ramulosa* var. *ramulosa* and open samphire shrubland of *Tecticornia indica* on playa edge dune.

Rocky Hillslope

Acacia Shrublands (MVG 16)

RH-AS1: Tall shrubland of *Acacia collegialis*/ *Acacia tetragonophylla* over mid open shrubland of *Dodonaea lobulata* and low open shrubland of *Chrysocephalum puteale* / *Ptilotus obovatus* on rocky hillslope.

Low Closed Forests and Tall Closed Shrublands (MVG 15)

RH-LCFTCS1: Tall open shrubland of *Melaleuca hamata* over mid open shrubland of *Scaevola spinescens* and open samphire shrubland of *Tecticornia halocnemoides* on quartz/ rocky low hill.

Clearing Description	Goongarrie Lady Project Resource Mining Pty Ltd (Resource Mining) proposes to clear up to 75 hectares of native vegetation within a boundary of approximately 146.662 hectares, for the purpose of mineral production and associated activities. The project is located approximately 43 kilometres southeast of Menzies, in the Shire of Menzies.
Vegetation Condition	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994). To: Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).
Comment	The vegetation condition is derived from a flora and vegetation survey conducted by Botanica Consulting (2017). The application area is located at the site of an historical minesite and previous disturbance includes an existing open cut pit and waste rock landform (Botanica Consulting, 2017). A previous clearing permit within L29/109 and M29/420 was granted to Intermin Resources Limited on 7 April 2017 (CPS 7468/1), allowing clearing of up to 179 hectares of native vegetation to develop the Goongarrie Lady Project. However, no clearing was conducted under this permit, and it was subsequently surrendered.

3. Assessment of application against Clearing Principles

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

Comments	<p>Proposal is not likely to be at variance to this Principle</p> <p>The application area is located within the Eastern Murchison subregion of the Murchison Bioregion of the Interim Biogeographic Regionalisation for Australia (GIS Database). The Eastern Murchison subregion is characterised by broad plains of red-brown soils and breakaway complexes as well as red sandplains. The vegetation of this subregion is dominated by Mulga Woodlands often rich in ephemerals; hummock grasslands, saltbush shrublands and <i>Tecticornia</i> shrublands (CALM, 2002).</p> <p>A Level 1 flora and vegetation survey was conducted by Botanica Consulting over the application area and surrounding areas during November 2016 (Botanica Consulting, 2017). A total of 91 flora species, from 21 families and 45 genera were recorded within the survey area (Botanica Consulting, 2017). No Threatened Flora, Threatened Ecological Communities or Priority Ecological Communities have been recorded within or in close proximity to the application area, and none were found during the survey (Botanica Consulting, 2021; GIS Database).</p> <p>Desktop surveys of available databases identified 12 priority flora species with the potential to occur within the survey area, based on known distributions and habitat preferences (Botanica Consulting, 2017; DBCA, 2007-). Targeted searches for priority flora were also conducted in April 2017 by DBCA staff members and Botanica Consulting (2021). In October 2020, further targeted searches were conducted by Western Botanical as part of proposed exploration programs (Botanica Consulting, 2021).</p> <p>From these surveys, four priority species were identified within the broader survey areas: <i>Calandrinia quartzitica</i> (P1), <i>Hybanthus floribundus</i> subsp. <i>chloroxanthus</i> (P3), <i>Ptilotus chortophytus</i> (P1) and <i>Ptilotus rigidus</i> (P1) (Botanica Consulting, 2021; Botanica Consulting, 2017). Of these, only <i>Ptilotus rigidus</i> (P1) was identified within the boundaries of the application area (Botanica Consulting, 2021). Out of a local population of 928 individuals, only 12 of these were recorded within the application area, which represents ~1.2% of surveyed individuals (Botanica Consulting, 2021). Furthermore, <i>Ptilotus rigidus</i> (P1) is not locally restricted, with populations recorded within two bioregions and subregions (Western Australian Herbarium, 1998-). Hence, the proposed clearing is unlikely to result in significant impacts to priority flora in a local or regional context.</p> <p>The vegetation condition within the survey area was described as good to very good on the Keighery scale, with parts of the application area previously disturbed by historical mining activities and more recent mineral exploration activities (Botanica Consulting, 2017).</p> <p>Two introduced flora species were recorded during the flora survey: <i>Medicago minima</i> and <i>Centaurea melitensis</i> (Botanica Consulting, 2017). 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 proposed clearing may be minimised by the implementation of a weed management condition.</p> <p>Fauna species diversity in the application area is likely to be typical for the bioregion, based on the presence of common and widespread fauna habitat types and the existing levels of disturbance (Botanica Consulting,</p>
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2017).

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 Botanica Consulting (2017)
Botanica Consulting (2021)
CALM (2002)
DBCA (2007-)
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

(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.

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

A Level 1 fauna and habitat survey was conducted over the application area and surrounding areas in November 2016 (Botanica Consulting, 2017). The survey comprised a desktop search of relevant fauna databases and a field reconnaissance survey.

The main habitat types within the application area were described as: clay-loam plains; closed depressions; lake edge dunes; rocky hillslopes; and playa lake. These habitat types are not locally or regionally restricted (Botanica Consulting, 2017).

Based on habitat preferences and known distributions, several fauna species of conservation significance (mostly birds) have the potential to occur within the application area (Botanica Consulting, 2017; DAWE, 2021; DBCA, 2007-). However, the majority of these species are highly mobile and all have wide distributions, and although they may pass through or forage within the area, they are unlikely to be specifically dependant on the habitats within the application area (Botanica Consulting, 2017). No fauna species of conservation significance were observed during the on-site survey (Botanica Consulting, 2017).

The fauna habitats found within the application area are common and widespread in the region (Botanica Consulting, 2017; GIS Database). Potential impacts to fauna are likely to be minor, and the vegetation proposed to be cleared is unlikely to represent significant habitat for fauna in a local or regional context.

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

Methodology Botanica Consulting (2017)
DAWE (2021)
DBCA (2007-)

GIS Database:
- Imagery
- Pre-European Vegetation

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

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

A flora survey of the application area did not record any species of Threatened flora (Botanica Consulting, 2017). The vegetation associations recorded within the application areas are well represented in surrounding areas (Botanica Consulting, 2017; 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 Botanica Consulting (2017)

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 (Botanica Consulting, 2017).

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

Methodology Botanica Consulting (2017)

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 Murchison IBRA bioregion (GIS Database). The vegetation within the application area is broadly mapped as the following vegetation associations:

20: Low woodland; mulga mixed with *Allocasuarina cristata* and *Eucalyptus* sp;

125: Bare areas; salt lakes; and

480: Succulent steppe with open low woodland; mulga and sheoak over salt bush (GIS Database).

These vegetation associations have not been extensively cleared, as over 90% remains at both a State and bioregional level for each of these vegetation associations (Government of Western Australia, 2019). The vegetation within the application area is not a remnant of native vegetation within 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 – Murchison	28,120,586	28,044,823	~99	Least Concern	7.78
Beard vegetation associations – WA					
20	1,295,103	1,292,475	~99	Least Concern	19.38
125	3,485,785	3,146,487	~90	Least Concern	9.29
480	86,099	86,064	~99	Least Concern	8.98
Beard vegetation associations – Murchison Bioregion					
20	1,174,259	1,171,630	~99	Least Concern	15.49
125	711,483	710,255	~99	Least Concern	7.20
480	48,745	48,710	~99	Least Concern	15.86

* 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)**

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 at variance to this Principle

There are no permanent watercourses or wetlands within or in close proximity to the application area (GIS Database). Part of the application area intersects with the edge of Lake Goongarrie, at the southern end of the lake (GIS Database). Lake Goongarrie is a large salt lake approximately 18 kilometres in length and covering an area of approximately 11,300 hectares (Botanica Consulting, 2017; GIS Database). The lake is dry for most of the year, only filling briefly following significant rainfall events (Botanica Consulting, 2017).

Several minor ephemeral drainage lines pass through the application area (GIS Database). Minor drainage lines in the area drain towards Lake Goongarrie and only flow briefly, immediately following significant rainfall (Botanica Consulting, 2017; CALM, 2002).

Based on the above, the proposed clearing is at variance to this Principle. However, due to the size of the lake and the abundance of ephemeral drainage channels in the region, the proposed clearing is unlikely to have any significant impact on vegetation associated with water courses or wetlands, including Lake Goongarrie.

Methodology Botanica Consulting (2017)
CALM (2002)

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

Most of the application area lies within the Carnegie land system, and to a lesser extent, the Gundockerta and Moriarty land systems (DPIRD, 2021).

The Carnegie land system is described as salt lakes and fringing level to gently sloping plains with saline alluvium and low sand dunes above surrounding saline plains. The lack of slope renders most of the system generally not susceptible to erosion except at lake margins where wind erosion may be exacerbated by loss of stabilising vegetation (DPIRD, 2021).

The Gundockerta land system is described as extensive undulating calcareous stony plains supporting bluebush shrubland. Where not protected by a stony mantle the saline plains and adjacent lower alluvial tracts are susceptible to water erosion, particularly in areas where perennial shrub cover is reduced, or the soil surface is disturbed (DPIRD, 2021).

The Moriarty land system is described as low greenstone rises and stony plains, supporting chenopod shrublands with patchy eucalypt overstorey. The low rises, alluvial plains and narrow drainage tracts in this land system are moderately susceptible to water erosion if the perennial shrub cover is substantially reduced or the soil surface disturbed.

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

Methodology DPIRD (2021)

(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

The southern section of the application area falls within the former Goongarrie pastoral lease, which is managed for conservation purposes by DBCA (formerly DPaW). The former Goongarrie pastoral lease covers an area of more than 100,000 hectares, approximately 115 hectares of which falls within the application area (GIS Database). The proposed clearing is unlikely to have any significant impacts on the environmental values of this or any other 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). The groundwater in the area is hypersaline, and the proposed clearing is unlikely to cause any significant changes in the groundwater quality (Botanica Consulting, 2017).

There are no permanent watercourses or wetlands within the application area (GIS Database). Part of the application area intersects with the edge of Lake Goongarrie, a large ephemeral salt lake (GIS Database). Minor saline drainage lines are abundant in the area and drain towards Lake Goongarrie. However, they are dry for most of the year, only flowing briefly immediately following significant rainfall (CALM, 2002).

Soils of the region are generally protected by stony mantles (CALM, 2002). Removal of vegetation and disturbance of the stony surface may result in an increase in runoff and may increase sediment loads in ephemeral drainage lines. However, the relatively flat terrain of the application area (GIS Database) will minimise surface water runoff, and any impacts to surface water quality are likely to be minimal.

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

Methodology Botanica Consulting (2017)
CALM (2002)

GIS Database:
- Hydrographic Catchments
- 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 semi-arid, with a low average rainfall of approximately 200 millimetres per year (Botanica Consulting, 2017; CALM, 2002). Drainage lines in the area are dry for most of the year, only flowing briefly immediately following significant rainfall (Botanica Consulting, 2017).

There are no permanent water courses or waterbodies within the application area (GIS Database). Part of the application area intersects with the edge of Lake Goongarrie, a large ephemeral salt lake (GIS Database). Temporary localised flooding may occur during heavy rainfall events. However, 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 Botanica Consulting (2017)
CALM (2002)

GIS Database:
- Hydrographic Catchments
- Hydrography, linear

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

Comments

The clearing permit application was advertised on 28 June 2021 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 (WC2017/001) over the area under application (DPLH, 2021). 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, 2021). 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 (2021)

4. References

- Botanica Consulting (2021) Supporting additional information received in relation to Resource Mining Ltd Clearing Permit Application CPS 9323/1. Botanica Consulting, June 2021.
- Botanica Consulting (2017) Level 1 Flora and Fauna Survey of the Goongarrie Lady Project. Report prepared for Intermin Resources Limited, by Botanica Consulting, January 2017.
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- DAWE (2021) EPBC Act Protect Matters Search Tool. Department of Agriculture, Water and the Environment. <https://www.environment.gov.au/epbc/protected-matters-search-tool> (Accessed 20 July 2021).
- DPIRD (2021) Advice received in relation to Clearing Permit Application CPS 9323/1. Commissioner of Soil and Land Conservation, Department of Primary Industries and Regional Development, Western Australia, 23 July 2021.
- DBCA (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Biodiversity, Conservation and Attractions. <https://naturemap.dbca.wa.gov.au/> (Accessed 20 July 2021).
- DPLH (2021) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS> (Accessed 20 July 2021).
- 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.
- Western Australian Herbarium (1998-) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions. <https://florabase.dpaw.wa.gov.au/> (Accessed 20 July 2021).

5. 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)
DAWE	Department of Agriculture, Water and the Environment, Australian Government
DBCA	Department of Biodiversity, Conservation and Attractions, Western Australia
DER	Department of Environment Regulation, Western Australia (now DWER)
DMIRS	Department of Mines, Industry Regulation and Safety, Western Australia
DMP	Department of Mines and Petroleum, Western Australia (now DMIRS)
DoEE	Department of the Environment and Energy (now DAWE)
DoW	Department of Water, Western Australia (now DWER)
DPaW	Department of Parks and Wildlife, Western Australia (now DBCA)
DPIRD	Department of Primary Industries and Regional Development, Western Australia
DPLH	Department of Planning, Lands and Heritage, Western Australia
DRF	Declared Rare Flora (now known as Threatened Flora)
DWER	Department of Water and Environmental Regulation, Western Australia
EP Act	<i>Environmental Protection Act 1986</i> , Western Australia
EPA	Environmental Protection Authority, Western Australia
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Federal Act)
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
PEC	Priority Ecological Community, Western Australia
RIWI Act	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
TEC	Threatened Ecological Community

Definitions:

{DBCA (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.