



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 9345/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Aragon Resources Pty Ltd

1.3. Property details

Property: Mining Lease 52/5
Mining Lease 52/125
Local Government Area: Shire of Meekatharra
Colloquial name: Labouchere Project

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 26 August 2021

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:
18: Low woodland; mulga (*Acacia aneura*); and
29: Sparse low woodland; mulga, discontinuous in scattered groups (GIS Database).

A flora and vegetation survey was conducted over the application area by Maia during September and October, 2016. The following vegetation associations were recorded within the application area (Maia, 2016):

- ASL-1: Sparse Tall *Acacia* Shrubland of either *Acacia incurvaneura* or *A. aptaneura* with a Sparse mixed Low Shrubland (*Eremophila phyllopoda*, *Ptilotus schwartzii*, and *Scaevola spinescens*) and Isolated Low Trees of *Acacia pruinocarpa* and/or *A. citrinoviridis*.
- ASL-2: Sparse Tall Shrubland of *Acacia incurvaneura* and/or *A. rhodophloia* with a mixed Sparse Low Shrubland (*Eremophila jucunda* subsp. *jucunda*, *E. obliquisejala* (P3), *Ptilotus schwartzii*) and Isolated Low Trees of either *Grevillea berryana*, *Acacia citrinoviridis* or *A. pruinocarpa*.
- ASL-3: Open Tall Shrubland of *Acacia incurvaneura* or *A. aptaneura* with a mixed Low Open Shrubland (*Eremophila latrobei* subsp. *latrobei*, *E. jucunda* subsp. *jucunda* and *Dodonaea pachyneura*) and +/- Scattered Mallee Trees of *Corymbia ferriticola*.
- ASL-4: Sparse Tall Shrubland of *Acacia aptaneura* and/or *A. xiphophylla* with a Sparse Low Shrubland of *Senna artemisioides* subsp. *oligophylla* x *helmsii* and *Solanum lasiophyllum* and a Sparse Chenopod Shrubland of *Sclerolaena eriacantha*, *Maireana georgei* and *Maireana villosa*.
- ASL-5: Open Tall Shrubland of *Acacia cuthbertsonii* subsp. *cuthbertsonii*, +/- *A. incurvaneura* or *A. rhodophloia* with a Sparse mixed Low Shrubland (*Dodonaea petiolaris*, *Eremophila glutinosa* and *E. exilifolia*) and Isolated Low Trees of *Acacia citrinoviridis* and/or *Grevillea berryana*.
- AWL-1: Low Woodland to Low Open Forest of *Acacia incurvaneura*, *A. aptaneura* and *A. cyperophylla* var. *cyperophylla* with a mixed Tall Shrubland (*Acacia cuthbertsonii* subsp. *cuthbertsonii*, *A. ramulosa* var. *linophylla*, *Eremophila forrestii* subsp. *forrestii*) and a mixed Low Shrubland (*Indigofera monophylla*, *Abutilon cryptopetalum* and *Enchylaena tomentosa* var. *tomentosa*).
- MSL-1: Sparse mixed Shrubland (*Senna glaucifolia*, *Eremophila phyllopoda* and *Ptilotus rotundifolius*) and a Sparse to Open Tussock Grassland of *Aristida contorta*.
- MSL-2: Sparse mixed Low Shrubland (*Pluchea dentex*, *Grevillea deflexa* and *Calytrix desolata*) with Isolated Low Trees of *Acacia citrinoviridis*.

Clearing Description Labouchere Project.
Aragon Resources Pty Ltd proposes to clear up to 95 hectares of native vegetation within a boundary of approximately 738.702 hectares, for the purpose of mineral production and associated activities. The project is located approximately 145 kilometres north-northwest of Meekatharra, within the Shire of Meekatharra.

Vegetation Condition Pristine: No obvious signs of disturbance (Keighery, 1994);
To

Comment

The vegetation condition was derived from a vegetation survey conducted by Maia (2016).

3. Assessment of application against Clearing Principles

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

Comments

Proposal is not likely to be at variance to this Principle

The clearing permit application area is located within the Augustus subregion of the Interim Biogeographic Regionalisation for Australia (IBRA) Gascoyne Bioregion (GIS Database). This subregion is characterised by Mulga woodland with *Triodia* occur on shallow stony loams on rises, while the shallow earthy loams over hardpan on the plains are covered by Mulga parkland (CALM, 2002).

Maia Environmental Consultancy (2016) conducted a Level 1 flora and vegetation survey over the application area during September and October, 2016. One hundred and seventy taxa from 80 genera and 34 families (73% perennial, 27% annual) were recorded during the survey (Maia, 2016).

No Threatened flora, Threatened Ecological Communities (TECs) or Priority Ecological Communities (PECs) have been recorded within the application area (Maia, 2016). Eight vegetation communities were identified during the flora survey, none of which are considered to be analogous to any known TECs or PECs, despite the application area being two kilometres west of the Robinson Range vegetation complexes (banded iron formation), which is a Priority 1 PEC (Maia, 2016; GIS Database).

Five Priority flora species have been recorded within the application area (Maia, 2016), these being:

- *Stenanthemum mediale* – Priority 1;
- *Eremophila obliquisejala* – Priority 3;
- *Gunniopsis propinqua* – Priority 3;
- *Indigofera gilesii* – Priority 3; and
- *Thryptomene* sp. Leinster – Priority 3.

The potential impacts of the proposed clearing to *Eremophila obliquisejala*, *Gunniopsis propinqua* and *Thryptomene* sp. Leinster are all considered to be minor, with the maximum local impact being 3.51%, 4% and 0% respectively (Maia, 2016).

Stenanthemum mediale was recorded at two locations close to one another in the application area (Maia, 2016). Five plants were recorded at one location and four at the other. This species was found in a minor gully at the top of a hill and occurs in a small patch of vegetation type ASL-5. These *Stenanthemum mediale* are rated as having high local significance based on the number of locations and plants and the cover of the single vegetation type in which they were located in the application area (Maia, 2016).

Indigofera gilesii (P3) was recorded at two locations in the application area (Maia, 2016). The plants were located in drainage lines and on hill slopes in vegetation types ASL-2 and ASL-5. Given the moderate distribution of the plants in the local area, the numbers in which they were located and the cover of the vegetation types in which they occur, this species is rated as having moderate local significance (Maia, 2016).

Maia (2016) has identified that the potential impacts to *Stenanthemum mediale* and *Indigofera gilesii* could be locally significant, with 100% of the local populations having the potential to be impacted by the proposed clearing (Maia, 2016). Potential impacts to these Priority flora species as a result of the proposed clearing may be minimised by the implementation of a flora management condition that restricts impacts to *Stenanthemum mediale* and *Indigofera gilesii*.

Three general weed species have been recorded in the Labouchere Project area (Maia, 2016). No weeds of national significance (WONS) or weeds declared as pests in Western Australia were recorded within the application area (Maia, 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 proposed clearing may be minimised by the implementation of a weed management condition.

Based upon vegetation habitat types and a fauna survey conducted within nearby areas in 2012, three broad fauna habitats have been identified within the application area, none of which are considered unique or restricted (Aragon, 2016; Maia, 2016; GIS Database). Areas of drainage line habitats occur within these three broad habitats which may offer higher value fauna habitat. However, drainage lines dissect only a small portion of the application area and can be found extensively outside areas proposed to be cleared (GIS Database).

The vegetation associations, fauna habitats and landform types present within the application area, are well represented in surrounding areas (Maia, 2016; 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

Aragon (2016)

CALM (2002)
Maia (2016)

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.

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

The following three broad fauna habitats have been recorded within the application area (Maia, 2016):

- Stony flat and undulating quartz plains and ironstone slopes;
- Crests and upperslopes of ironstone hills; and
- Gullies, depressions and broad drainage areas.

None of these habitat types are restricted to the application area and are common in the local area (Maia, 2016; GIS Database). It is noted that the 'Gullies, depressions and broad drainage areas' habitat may offer higher value fauna habitat (Maia, 2016). However, drainage lines dissect only a small portion of the application area and can be found extensively outside areas proposed to be cleared (GIS Database). Potential impacts to the drainage line habitat as a result of the proposed clearing may be minimised by the implementation of a watercourse management condition. It is considered unlikely that the application area supports a higher level of fauna diversity than surrounding, uncleared areas of native vegetation in the local and regional area.

It is noted that a portion of the application area has been subject to significant disturbance as a result of historic mining activities. A pit lake remains within the northern central part of the application area and the condition of the vegetation is considered to be predominately degraded in this area (Maia, 2016). Flora and fauna biodiversity values are expected to be low in this area.

According to available databases, there are no records of conservation significant fauna species known from the local area (20 kilometre radius) (DBCA, 2007-). A fauna survey conducted in 2012 in nearby areas recorded the occurrence of the Australian Bustard (*Ardeotis australis*) and Bush Stone-Curlew (*Burhinus grallarius*) (Aragon, 2016). The Australian Bustard and Bush Stone-Curlew are no longer listed as priority fauna and impacts to these species are unlikely to be significant given they are avian fauna with large ranges and can easily vacate the area.

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

Methodology Aragon (2016)
DBCA (2007-)
Maia (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, threatened 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 (Maia, 2016).

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

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

Methodology Maia (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 (Maia, 2016).

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

Methodology Maia (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 Gascoyne Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 99% of the pre-European vegetation still exists in the IBRA Gascoyne Bioregion (Government of Western Australia, 2019). The application area is broadly mapped as Beard vegetation associations 18: Low woodland; mulga (*Acacia aneura*); and 29: Sparse low woodland; mulga, discontinuous in scattered groups (GIS Database). Approximately 99% of the pre-European extent of each of these vegetation associations remains uncleared at both the state and bioregional level (Government of Western Australia, 2019).

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 – Gascoyne	18,075,219	18,067,441	~99	Least Concern	10.27
Beard vegetation associations – WA					
18	19,892,306	19,843,148	~99	Least Concern	6.62
29	7,903,991	7,898,973	~99	Least Concern	6.28
Beard vegetation associations – Gascoyne Bioregion					
18	3,273,580	3,271,339	~99	Least Concern	9.66
29	3,802,460	3,799,636	~99	Least Concern	7.81

* 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 the area proposed to clear (Maia, 2016; GIS Database). Numerous seasonal creek lines pass through the application area (GIS Database). Creek lines in the region are dry for most of the year, only flowing briefly immediately following significant rainfall (Maia, 2016).

Based on the above, the proposed clearing is at variance to this Principle. Potential impacts to vegetation growing in association with watercourses may be minimised by the implementation of a watercourse management condition.

Methodology Maia (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 lies within the Augustus and Beasley land systems (GIS Database). These land systems have been mapped and described in technical bulletins produced by the former Department of Agriculture (now the Department of Primary Industries and Regional Development).

The Augustus land system is described as 'Rugged ranges, hills, ridges and plateaux supporting mulga shrublands in southern parts or hard spinifex grasslands in northern most parts.' This land system is not generally susceptible to erosion (Van Vreeswyk et al., 2004).

The Beasley land system consists of 'Low ridges, hills and lateritised residuals above stony footslopes and broad, stony lower plains supporting scattered mulga and snakewood-dominated shrublands.' This land system is not generally susceptible to erosion (Van Vreeswyk et al., 2004).

The proposed clearing of up to 95 hectares of native vegetation within a boundary of approximately 738.702 hectares, for the purpose of mineral production and associated activities 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 Van Vreeswyk et al. (2004)

GIS Database:

- Landsystem Rangelands
- Soils, Statewide

(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 former Doolgunna Pastoral Lease which is located approximately 57 kilometres southeast 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). Creek lines in the region are dry for most of the year, only flowing briefly immediately following significant rainfall. 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
- 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**

One soil type has been mapped over the application area. Soil type Oc49, which is described as partially dissected pediments with some low stony hills on fine-grained sedimentary rocks and basic dykes, frequently flanking areas of steep ranges. Hard alkaline red soils are feature (Northcote et al., 1960-68).

It is possible that areas of hard alkaline soils may hold water for short periods following significant rainfall events, although with an average annual rainfall of 234.9 millimetres and an average annual evaporation rate exceeding 3,000 millimetres (BoM, 2021), waterlogging and flooding are not considered to be major concerns, arising from the clearing native vegetation. The proposed clearing of 95 hectares of native vegetation is not considered likely to result in an increase in the incidence or intensity of flooding in a desert climate.

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

Methodology BoM (2021)
Northcote et al. (1960-68)

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

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

Comments

The clearing permit application was advertised on 2 August 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 over the area under application (DPLH, 2021). This claim has been determined by the Federal Court 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

- Aragon (2016) Fortnum Gold Project Nathans Mining Area, NVCP application – Supporting Information. Aragon Resources Pty Ltd, February 2017.
- BoM (2021) Bureau of Meteorology Website – Climate Data Online, Meekatharra. Bureau of Meteorology.
<http://www.bom.gov.au/climate/data/> (Accessed 23 August 2021).
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- DBCA (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Biodiversity, Conservation and Attractions.
<https://naturemap.dbca.wa.gov.au/> (Accessed 23 August 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 23 August 2021).

- 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.
- 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.
- Maia (2016) Metals X: Labouchere Survey Area (Tenements M52/5, M52/125, P52/1508, L52/172, P52/1509 and P52/1511) – Level 1 Reconnaissance and Targeted Flora Survey. Unpublished report prepared for Metals X by Maia Environmental Consultancy, September 2016.
- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.
- Van Vreeswyk, A.M.E., Payne, A.L., Leighton, K.A. and Hennig, P. (2004) An inventory and condition survey of the Pilbara Region, Western Australia. Technical Bulletin No. 92. Department of Agriculture, South Perth, Western Australia.

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.