Government of Western Australia
Department of Mines, Industry Regulation and Safety

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 9366/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Karara Mining Limited**

1.3. Property details

Property: Miscellaneous Licence 59/191
Local Government Area: Shire of Perenjori
Colloquial name: Karara Telecommunication Tower

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.4		Mechanical Removal	Communications Tower and Access Track

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 19 October 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 association:
358: Shrublands; bowgada & *Acacia quadrimarginea* on stony ridges (GIS Database).

A targeted flora survey was conducted over the application area and surrounds by Jenny Borger Botanical Consulting (JBBC) on 2 April 2021. The following vegetation types were recorded within the application area and surrounds (JBBC, 2021):

VA1 – Hill, mid to upper slopes, gentle slope
Allocasuarina dielsiana emergent low trees over *Allocasuarina tessellata*, *Melaleuca hamata*, *Acacia burkittii* tall shrubland over *Chamelaucium* sp. *Warriedar*, *Melaleuca radula* sparse shrubland over *Tricoryne tuberosa*, *Erodium cygnorum*, *Sida calyxhymenia*, *Asteraceae* sp. (germinating), *Acacia* sp. (seedlings) low sparse forbland.

VA2 – Hill, rocky ridge with rocky scree slope, south aspect; moderate to steep slope
Allocasuarina dielsiana, *Melaleuca hamata*, *Acacia burkittii* low open woodland over *Allocasuarina tessellata*, *Dodonaea inaequifolia*, *Acacia burkittii* tall sparse shrubland over *Melaleuca radula*, *Allocasuarina tessellata*, *Dodonaea inaequifolia* open shrubland over *Lepidosperma* sp. Blue Hills, *Melaleuca radula*, *Solanum lasiophyllum* sedgeland to open sedgeland.

VA3 – Hill; midslopes; northerly aspect; moderate slope
Allocasuarina dielsiana isolated low trees over *Allocasuarina tessellata*, *Acacia karina*, *Allocasuarina dielsiana*, *Acacia burkittii* open to sparse shrubland over *Acacia karina*, *Grevillea subtiliflora*, *Chamelaucium* sp. Warriedar, *Ptilotus obovatus* low sparse shrubland over isolated patches of germinating grasses.

Clearing Description

Karara Telecommunication Tower.
Karara Mining Limited proposes to clear up to 0.4 hectares of native vegetation within a boundary of approximately 0.409 hectares, for the purpose of communications tower and access track. The project is located approximately 113 kilometres northeast of Three Springs, within the Shire of Perenjori.

Vegetation Condition

Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).

to

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

Comment

The vegetation condition was derived from a vegetation survey conducted by JBBC (2021).

The proposed clearing is for an access track and telecommunications tower to improve mobile phone coverage at the Karara Iron Ore Project located approximately 10 kilometres northwest of the application area (JBBC, 2021).

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 Tallering subregion of the Interim Biogeographic Regionalisation for Australia (IBRA) Yalgoo Bioregion (GIS Database). The Tallering subregion is characterised by low woodlands to open woodlands of *Eucalyptus*, *Acacia* and *Callitris* on red sandy plains of the Western Yilgarn Craton and southern Carnarvon Basin (CALM, 2002). The Carnarvon Basin consists of Mulga, *Callitris* and *Eucalyptus salubris*, and Bowgada open woodlands and scrubs on earth to sandy-earth plains in the western Yilgarn Craton (CALM, 2002). The subregion is particularly rich in ephemerals (CALM, 2002).

A flora and vegetation assessment of the application area and surrounds was conducted by Jenny Borger Botanical Consulting on 2 April 2021 (JBBC, 2021). The vegetation of the application area was dominated by *Allocasuarina* open woodland, *Melaleuca* shrubland, and *Acacia* shrubland (JBBC, 2021). No Threatened or Priority Ecological Communities were identified as potentially occurring in the application area and the field assessment of the application area did not record any (JBBC, 2021; GIS Database).

A total of 28 flora taxa from 22 genera and 18 families were recorded within the application area and surrounds during the field assessment (JBBC, 2021). The flora survey identified six Priority flora species: *Acacia karina* (P1), *Chamelaucium* sp. Warriedar (P1), *Lepidosperma* sp. Blue Hills (P1), *Allocasuarina tessellata* (P3), *Grevillea scabrida* (P3), and *Grevillea subtiliflora* (P3) (JBBC, 2021). All recorded locations of these species occur outside the application area, however as there are numerous occurrences of most Priority flora and the broad scale of the flora survey there is a potential these species may be impacted by the proposed clearing (JBBC, 2021). Species that may be impacted by the proposed clearing are *Acacia karina*, *Chamelaucium* sp. Warriedar, *Allocasuarina tessellata*, and *Grevillea subtiliflora* (JBBC, 2021). If these species were present, the estimated impact to these species range from 7% to 17% (JBBC, 2021). These numbers are based on estimated density within the total area surveyed (6 hectares) (JBBC, 2021). Given that none of these species were recoded within the application area, the proposed clearing is unlikely to significantly impact these species populations or conservation status. All Priority flora are well represented locally and are likely abundant within the surrounding areas based on vegetation and landscape mapping (JBBC, 2021; Western Australian Herbarium, 1998-). The application area is at low risk of further impacts from mining (JBBC, 2021).

A desktop assessment identified a total of 210 vertebrate fauna species as potentially occurring within application area and surrounds, including seven amphibian, 117 bird and 24 (native) mammal species (KML, 2021). Of these, three amphibian, 102 bird, and 20 (native) mammal species have been recorded in the greater Karara mining area over the past 13 years (KML, 2021). The only conservation significant fauna species identified during the field assessment was Malleefowl (*Leipoa ocellata*, VU at a state and federal level). A fauna management condition will be utilised to help mitigate potential impacts to malleefowl. The application area represents a very small area of available habitat and the proposed clearing is unlikely to reduce fauna diversity within the region.

The vegetation association, fauna habitats and landform types present within the application area, are well represented in surrounding areas (JBBC 2021; 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)
JBBC (2021)
KML (2021)
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.

Comments

Proposal may be at variance to this Principle

A fauna assessment of the application area and surrounds was conducted by KML (2021) on 2 and 20 April 2021. The following fauna habitat was recorded within the application area (KML, 2021): ironstone-based ridge with outcropping rock and slopes with cobbles and gravel supporting a mixed shrubland dominated by *Allocasuarina*, *Acacia*, and *Melaleuca*.

An active malleefowl (*Leipoa ocellata*, VU at a state and federal level) mound was recorded 66 metres south of the application area (KML, 2021). Fresh tracks, pieces of egg shell, feathers, and scats were also recorded at the mound on both survey dates (KML, 2021). Suitable mallefowl breeding and foraging habitat occurs within application area (KML, 2021). Potential impacts to malleefowl may be minimised by a fauna management condition. The fauna management condition will require the application area be inspected to identify active malleefowl mounds within two weeks prior to undertaking any clearing between 1 September and 31 January. Should active mounds be located, they are to be avoided and a 50 metre buffer maintained.

No other conservation significant fauna are expected to occur or be reliant upon fauna habitat within the application area. The fauna habitat recorded within the application area is represented within the surrounds (KML, 2021).

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

Methodology

KML (2021)

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 (JBBC, 2021).

The vegetation association within the application area is common and widespread within the region (JBBC, 2021; 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

JBBC (2021)

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 (JBBC, 2021).

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

Methodology

JBBC (2021)

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 Yalgoo Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 97% of the pre-European vegetation still exists in the IBRA Yalgoo Bioregion (Government of Western Australia, 2019). The application area is broadly mapped as Beard vegetation association 358: Shrublands; bowgada & *Acacia quadrimarginea* on stony ridges (GIS Database). Approximately 99% of the pre-European extent of this vegetation association remains uncleared at both the state, bioregional, and subregional 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 – Yalgoo	5,057,325	4,923,840	~97	Least Concern	31.34
IBRA Subregion - Tallering	3,498,943	3,387,092	~96	Least Concern	23.71
Local Government - Yalgoo	2,794,946	2,733,268	~97	Least Concern	22.51
Beard vegetation association – WA					
358	59,719.25	59,576.78	~99	Least Concern	35.85
Beard vegetation association – Yalgoo Bioregion					
358	55,529.71	55,447.71	~99	Least Concern	31.84
Beard vegetation association – Tallering Subregion					
358	55,529.71	55,447.71	~99	Least Concern	31.84

* 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 not at variance to this Principle

There are no watercourses or wetlands within the area proposed to clear (KML, 2021; GIS Database).

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

Methodology

KML (2021)

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 Singleton land system (GIS Database). This land system has been mapped and described in technical bulletins produced by the former Department of Agriculture (now the Department of Primary Industries and Regional Development).

The Singleton land system is described as rugged greenstone ranges with dense *Casuarina* and *Acacia* shrublands (Payne et al., 1998). This land system is not generally susceptible to erosion, as stone mantles protect most of this land system against erosion (Payne et al., 1998). The proposed clearing 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 Payne et al. (1998)

GIS Database:
- Landsystem Rangelands

(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 application area is located within the former Karara Pastoral Lease, managed by DBCA (formerly DPaW) and proposed for conservation (GIS Database). The proposed clearing represents <0.01% of the former Karara Pastoral Lease (GIS Database). The proposed clearing is unlikely to impact on the environmental values of the former Karara Pastoral Lease.

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 or ephemeral 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
- Public Drinking Water Source Areas

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

Comments **Proposal is not likely to be at variance to this Principle**
The climate of the region arid to semi-arid warm Mediterranean, with an average rainfall of approximately 285.4 millimetres per year (BoM, 2021; CALM, 2002).

There are no permanent or ephemeral water courses or waterbodies within the application area (GIS Database). The application area is located at the peak of a hill, with water running off to the surrounds (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 (2021)
CALM (2002)

GIS Database:
- Hydrography, linear
- Topographic Contours, 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 (WC2019/008) 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

BoM (2021) Bureau of Meteorology Website – Climate Data Online, Paynes Find. Bureau of Meteorology. http://www.bom.gov.au/climate/data/ (Accessed 13 October 2021).

CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, 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.

DPLH (2021) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS (Accessed 13 October 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

JBBC (2021) Targeted flora survey of the proposed installation of a new communications tower in tenement L59/191. Prepared by Jenny Borger Botanical Consulting, for Karara Mining Limited, July 2021.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

KML (2021) Fauna Assessment for Karara Telecommunication Tower (L59/191). Prepared by Karara Mining Limited, April 2021.

Payne, A.L., Van Vreeswyk, A.M., Leighton, K.A., Pringle, H.J. and Hennig, P. (1998), An inventory and condition survey of the Sandstone-Yalgoo-Paynes Find area, Western Australia. Technical Bulletin 90. Department of Agriculture and Food, Western Australia, Perth.

Western Australian Herbarium (1998-) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions. https://florabase.dpaw.wa.gov.au/ (Accessed 15 October 2021).

5. Glossary

Acronyms:

BC Act	*Biodiversity Conservation Act 2016,* 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	*Environmental Protection Act 1986*, Western Australia
EPA	Environmental Protection Authority, Western Australia
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (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	*Rights in Water and Irrigation Act 1914*, 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.