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.: 9188/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Medallion Metals Limited**

1.3. Property details

Property: Mining Lease 74/53
Local Government Area: Shire of Ravensthorpe
Colloquial name: Gem Restored and Northern Gift Exploration Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1.02		Mechanical Removal	Mineral Exploration

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 29 April 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 (GIS Database):
47: Shrublandsl tallerack mallee-heath; and
516: Shrublands; mallee scrub, black marlock.

A flora and vegetation survey was conducted over the greater Ravensthorpe Gold project over multiple years which included the application area (Animal Plant Mineral, 2018). The following vegetation communities were recorded within the application area (Animal Plant Mineral, 2018; Talis Consultants, 2021):

Ecli - *Eucalyptus clivicola*: Mallet dominated system
Efal - *Eucalyptus falcata*: Proteaceous Mallee-heath
Efal/Eple - *Eucalyptus falcata/ E. pleurocarpa*: Proteaceous Mallee-heath
Epil - *Eucalyptus pileata*
Epro/Mspp - *Eucalyptus proxima*/ Melaleuca species
Macu - *Melaleuca acuminata*
Mstr - *Melaleuca stramentosa*

There were also areas mapped as completely degraded.

Clearing Description

Gem Restored and Northern Gift Exploration Project.
Medallion Metals Limited proposes to clear up to 1.02 hectares of native vegetation within a boundary of approximately 1.06 hectares, for the purpose of mineral exploration. The project is located approximately 14 kilometres southeast of Ravensthorpe, within the Shire of Ravensthorpe.

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 Animal Plant Mineral (2018). This survey covers the greater Ravensthorpe Gold project which the application area lies at the northern periphery.

The application area is comprised of a number of discrete polygons for access tracks and exploration drill pads (see Figure 1).

Figure 1 – Clearing permit 9188/1 application area.

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 application area is located within the Fitzgerald subregion of the Esperance Plains Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). The Fitzgerald subregion primarily consists of dry sclerophyllous woodland, coastal woodlands and heath (CALM, 2002). The area has a rich diversity of flora and fauna species; with the Fitzgerald Biosphere Reserve, where the application area is located, containing over 250 rare and geographically restricted plant and animal species (CALM, 2002). Of the 2,000 vascular plant species native to the area, approximately 75% are endemic (CALM, 2002). The Fitzgerald River Ravensthorpe area is also one of Australia's National Biodiversity Hotspots (Department of Environment and Energy, 2018).

A flora and vegetation survey of the greater Ravensthorpe Gold Project recorded seven vegetation communities within the application area (Talis Consultants, 2021). The '*Eucalyptus falcata*: Proteaceous Mallee-heath' and '*Eucalyptus clivicola*: Mallet dominated system' vegetation communities were considered to represent the Priority 3 Ecological Community (PEC); 'Proteaceae dominated kwongkan shrublands of the Southeast Coastal Floristic province of Western Australia' (Talis Consultants, 2021). This community is also listed as endangered under the *Environment Protection and Biodiversity Conservation Act 1999* (GIS Database). This PEC is characterised by high levels of species diversity and high degrees of endemism (DBCA, 2020). This PEC has a wide range from Albany to Cape Arid National Park however, current mapping is indicative as detailed mapping of the community has not been conducted. There is approximately 0.3 hectares of the PEC within the application area (Talis Consultants, 2021). Review of vegetation mapping across the Ravensthorpe Range (over 10,000 hectares) indicates that there is 1,077 hectares of vegetation which represents the PEC and a further 3,149 hectares which is possibly the PEC based on close similarities between vegetation characteristics (Talis Consultants, 2021). Based on the known mapping in the Ravensthorpe Range, the proposed clearing of 0.3 hectares of the PEC is not likely to have a significant impact on the maintenance and conservation of this community.

Previous flora surveys of the broader Kundip area have identified a total of 312 flora species from 50 different families (Talis Consultants, 2021). The vegetation within the application area has the potential to support several Priority flora species as *Lepidosperma* sp. Maydon (Priority 1), *Stachystemon vinosus* (Priority 4) and *Thysanotus parviflorus* (Priority 4) were recorded within 50 metres of the application area and *Hydrocotyle tuberculata* (Priority 2), *Thomasia* sp. Hopetoun (Priority 2) and *Grevillea fulgens* (Priority 3) were all recorded within 500 metres of the application area (Talis Consultants, 2021). The Priority 4 species *Marianthus mollis* was recorded in abundance in the area (over 70 records within 250 metres of the application area) and several of the plants will be impacted by the proposed clearing (Talis Consultants, 2021). Surveys for this species have identified 44,998 plants from 12 sub-populations, including over 1,500 recorded during the survey for the Ravensthorpe Gold project (Animal Plant Mineral, 2018; Threatened Species Scientific Committee, 2017). The removal of a small number of plants and 1.02 hectares of habitat is not likely to have a significant impact on this species.

The flora survey of the greater Ravensthorpe Gold project recorded 17 species of weed including *Asparagus asparagoides* which is a declared pest under the *Biosecurity and Management Act 2007* (Animal Plant Mineral, 2018). Clearing activities may spread or introduce weeds, which have the potential to out-compete native flora and reduce the biodiversity of an area. Dieback has not been recorded within the application area however, it is known from the Ravensthorpe area (Talis Consultants, 2021). Potential impacts to biodiversity as a result of

the proposed clearing may be minimised by the implementation of a dieback and weed management condition.

The fauna habitat within the application area is well represented in the surrounding uncleared vegetation and the relatively small application area (1.06 hectares) is not likely to support a high level of faunal diversity on its own. The proposed clearing of 1.02 hectares is not likely to have a significant impact on the diversity of fauna species in the local area.

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

Methodology

Animal Plant Mineral (2018)
CALM (2002)
DBCA (2020)
Department of the Environment and Energy (2018)
Talis Consultants (2021)
Threatened Species Scientific Committee (2017)

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

The following three fauna habitats have been recorded within the application area (Talis Consultants, 2021):

- Low woodland mallee and heath
- Low dense forest / forest habitat
- Damplands and drainage

There are also areas of habitat mapped as completely degraded (Talis Consultants, 2021). The large majority of the habitat within the application area (over 75%) is comprised of the low woodland and mallee heath habitat (Talis Consultants, 2021). This habitat also covers the majority of the area mapped during regional surveys of the Ravensthorpe Range and recorded the majority of fauna species during a fauna survey of the greater Ravensthorpe Gold project (Animal Plant Mineral, 2018).

The following conservation significant fauna species were all recorded during the fauna survey of the greater Ravensthorpe Gold project (Animal Plant Mineral, 2018):

- Carnaby's Cockatoo (*Calyptorhynchus latirostris* – Endangered)
- Peregrine Falcon (*Falco peregrinus* – Other specially protected fauna)
- Malleefowl (*Leipoa ocellata* – Vulnerable)
- Western Whipbird (mallee) (*Psophodes nigrogularis oberon* – Priority 4)
- Raventhorpe Range Slider (*Lerista viduata* – Priority 1)
- Western Quoll (*Dasyurus geoffroii* – Vulnerable)
- Quenda (*Isoodon fusciventer* – Priority 4)
- Western Brush Wallaby (*Notamacropus irma* – Priority 4)

Whilst these species may utilise the application area, the proposed clearing of 1.02 hectares for mineral exploration is not likely to have a significant impact on the availability or maintenance of the fauna habitats in the local area. Where possible existing tracks will be used to minimise clearing (Talis Consultants, 2021).

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

Methodology

Animal Plant Mineral (2018)
Talis Consultants (2021)

(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 (Animal Plant Mineral, 2018). There are

records of the Threatened flora species *Acacia rhamphophylla* within one kilometre of the application area (GIS Database). There are also records of *Daviesia megacalyx* approximately 3.5 kilometres from the application area (GIS Database). These records are located on similar soil types to the application area (GIS Database). There is also likely to be similar vegetation present within the application area (GIS Database). Whilst not clearing any plants, the proposed clearing may remove potential habitat for Threatened flora species. However, the exploration drilling will use existing tracks where possible and will only result in the clearing of 1.02 hectares of vegetation (Talis Consultants, 2021). The application area is located within a large tract of uncleared vegetation and the clearing of 1.02 hectares is not likely to have a significant impact on the habitat availability for Threatened flora species.

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

Methodology Animal Plant Mineral (2018)
Talis Consultants (2021)

GIS Database:
- Pre-European Vegetation
- Threatened and Priority Flora
- Soils, Statewide

(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 (Animal Plant Mineral, 2018).

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

Methodology Animal Plant Mineral (2018)

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 Esperance Plains Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 51.53% of the pre-European vegetation still exists in the Esperance Plains Bioregion (Government of Western Australia, 2019). The application area is broadly mapped as Beard vegetation associations 47 and 516 (GIS Database). Vegetation association 516 has not been extensively cleared as over 50% remains uncleared at a state and bioregional level (see table) (Government of Western Australia, 2019). Vegetation association 47 has been subject to greater levels of clearing and is classified as depleted as approximately 35-36% of the pre-European extent remains at both the state and bioregional level (Government of Western Australia, 2019). The application area lies within a large tract of vegetation that includes Fitzgerald River National Park to the west (GIS Database). 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 – Esperance Plains	2,899,941	1,494,451	~52	Least Concern	29
Beard vegetation associations – WA					
47	1,033,055	370,435	~36	Depleted	18
516	607,434	332,848	~55	Least Concern	24
Beard vegetation associations – Esperance Plains Bioregion					

47	959,935	336,492	~35	Depleted	19
516	318,747	219,798	~69	Least Concern	29

* 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:
- DPaW Tenure
- 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 two minor ephemeral drainage lines which intersect the application area at several points, one running through the eastern side of the application area and the other through the western portion (GIS Database). Both of these drainage lines eventually report to the Steere River to the west of the application area (GIS Database). The Macu - *Melaleuca acuminata* vegetation community traces the path of the drainage line on the eastern side of the application area (Talis Consultants, 2021; GIS Database). The proposed clearing will only remove a very small amount of vegetation growing in association with these watercourses and is not likely to have a significant impact on the function of watercourses in the local area.

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

Methodology Talis Consultants (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 at the top of a ridgeline and is relatively steep with a change in relief of 30 metres across the span of the application area (approximately 500 metres).

The soil of the application area has been broadly described as ranges of greenstones (basic igneous rocks) with some rock outcrops: the soils are shallow calcareous loamy soils on the steeper slopes with cracking clays on the more moderate slopes (Northcote et al., 1960-68).

The proposed clearing is for access tracks and discrete exploration drill pads (Talis Consultants, 2021). With the exception of sumps, the proposed exploration activities will not require the removal of topsoil (Talis Consultants, 2021).

The proposed clearing of 1.02 hectares within the application area is not likely to cause significant erosion or land degradation.

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

Methodology Northcote et al. (1960-68)
Talis Consultants (2021)

GIS Database:
- Soils, Statewide
- Topographic Contours, 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 managed land is the Kundip Nature Reserve which is located approximately 3 kilometres south 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 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 of 1.02 hectares is unlikely to result in significant changes to surface water flows.

There are no Public Drinking Water Source Areas within or in close proximity to the application area (GIS Database). 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

There are no permanent water courses or waterbodies within the application area (GIS Database). Seasonal drainage lines are common in the region and temporary localised flooding may occur briefly following heavy rainfall events. The application area is located on the upper slopes of a ridge (GIS Database). The clearing of vegetation on upper slopes can lead to increased runoff and therefore, a potential increase in flooding in areas downslope. However, the proposed clearing is for small discrete areas and is unlikely to increase the incidence or intensity of natural flooding events in the local area.

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

Methodology

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 15 March 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.

This clearing permit application is related to the Ravensthorpe Gold project which was formally assessed by the Environmental Protection Authority (EPA), and approved under Ministerial Statement 1143 on 20 July 2020.

The permit area is within the South West Native Title Settlement area (DPLH, 2021). This settlement resolves Native Title rights and interests over an area of approximately 200,000 square kilometres within the south west of Western Australia. 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

Animal Plant Mineral (2018) Ravensthorpe Gold Project Biological Survey, Ravensthorpe, WA. Prepared for ACH Minerals Pty Ltd, by Animal Plant Mineral Pty Ltd, November 2018.

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

DBCA (2020) Priority Ecological Communities for Western Australia Version 29. Prepared by Species and Communities Program, Department of Biodiversity, Conservations and Attractions, 5 May 2020.

Department of Environment and Energy (2018) Australia's 15 National Biodiversity Hotspots. http://www.environment.gov.au/biodiversity/conservation/hotspots/national-biodiversity-hotspots (Accessed 27 April 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 27 April 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.

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.

Talis Consultants (2021) Native Vegetation Clearing Permit Application for the Ravensthorpe Gold Project Northern Gift and Gem Restored Exploration Programme – M74/51, M74/53, M74/135, E74/311. Prepared for Medallion Metals Limited, by Talis Consultants, 8 January 2021.

Threatened Species Scientific Committee (2017) Listing Advice – *Marianthus mollis,* hairy-fruited billardiera. http://www.environment.gov.au/biodiversity/threatened/species/pubs/82825-listing-advice-15022018.pdf

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.