



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 8756/1

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Paddington Gold Pty Ltd

1.3. Property details

Property: Mining Lease 24/182
Mining Lease 24/223
Mining Lease 24/393
Mining Lease 24/838

Local Government Area: City of Kalgoorlie-Boulder

Colloquial name: Rose Dam South Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
143		Mechanical Removal	Mineral Production and associated activities

1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 20 February 2020

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description The vegetation of the application area is broadly mapped as the following Beard vegetation association/s:
468: Medium woodland; salmon gum and goldfields blackbutt; and
540: Succulent steppe with open low woodland; sheoak over saltbush (GIS Database).

A reconnaissance flora and vegetation survey was conducted over the majority of the application area (approximately 119 hectares) by Native Vegetation Solutions (NVS, 2019a) on 6 June 2019. The following vegetation associations were recorded within the application area (NVS, 2019a):

1. ***Eucalyptus salmonophloia* woodland:** Woodland dominated by *Eucalyptus salmonophloia* over a mixed sclerophyll shrubland including *Atriplex nummularia* subsp. *spathulata*, *Atriplex bunburyana*, *Acacia tetragonophylla*, *Senna artemisioides* subsp. *filifolia*, *Eremophila scoparia* and *Eremophila parvifolia* subsp. *auricampa*;

2. ***Eucalyptus clelandiorum* and *Eucalyptus griffithsii* over sclerophyll shrubland:** Low Woodland dominated by *Eucalyptus clelandiorum* and *Eucalyptus griffithsii* over sclerophyll shrublands including *Acacia colletioides*, *Eremophila oldfieldii*, subsp. *angustifolia*, *Senna artemisioides* subsp. *filifolia*, *Scaevola spinescens*, *Maireana sedifolia*, *Olearia muelleri*, and *Dodonaea lobulata*; and

3. ***Eucalyptus griffithsii* over sclerophyll shrubland:** Tree Mallee dominated by *Eucalyptus griffithsii* over a sclerophyll shrubland of *Eremophila scoparia*, *Eremophila dempsteri*, *Acacia hemiteles*, *Maireana sedifolia*, and *Atriplex nummularia* subsp. *spathulata*.

Vegetation type 1 represented the majority of the survey area (approximately 75 percent), with only one small isolated pocket each of vegetation types 2 and 3 recorded within the application area (NVS, 2019a). Approximately 24 hectares of the clearing permit application area was not included in the survey area.

Clearing Description Rose Dam South Project.
Paddington Gold Pty Ltd proposes to clear up to 143 hectares of native vegetation within a boundary of approximately 143 hectares, for the purpose of mineral production and associated activities. The project is located approximately 30 kilometres northwest of Kalgoorlie, within the City of Kalgoorlie-Boulder.

Vegetation Condition Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).
To:
Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).

Comment The vegetation condition was derived from a vegetation survey conducted by Native Vegetation Solutions (NVS, 2019a). The vegetation of the majority of the survey area was considered to be in Good condition, on the Keighery scale, with two small areas rated as Very Good and one smaller area rated as Degraded (NVS, 2019a).

3. Assessment of application against Clearing Principles

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

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

The clearing permit application area is located within the Eastern Goldfields subregion of the Interim Biogeographic Regionalisation for Australia (IBRA) Coolgardie Bioregion (GIS Database). The Eastern Goldfields subregion is characterised by gently undulating plains, with low hills and ridges and a series of salt lakes in the west, and a raised fault-block to the east. Calcareous soils are dominant on the plains. The vegetation of the subregion is dominated by Mallees, Acacia thickets and shrub-heaths on sandplains, and diverse *Eucalyptus* woodlands around salt lakes, on ranges, and in valleys (CALM, 2002).

The application area falls on the northern edge of the area known as the Great Western Woodlands, which represents the largest and most intact eucalypt woodland remaining in southern Australia and is one of the best examples of its type in the world (DEC, 2010). The Great Western Woodlands covers a total area of approximately 16 million hectares, and is recognised for its flora and fauna species richness and high number of endemic flora species (DEC, 2010). However, at approximately 143 hectares in size, the clearing permit application area represents less than 0.001 percent of the area covered by the Great Western Woodlands, and the proposed clearing of 143 hectares is unlikely to have any significant impact on the conservation values of the Great Western Woodlands.

A reconnaissance flora and vegetation survey was conducted by Native Vegetation Solutions (NVS) over a 268.8 hectare area, (including approximately 119 hectares of the 143 hectare clearing permit application area), during June 2019 (NVS, 2019a). A total of 105 flora species, from 22 families and 51 genera were recorded within the broader survey area (NVS, 2019a). Approximately 24 hectares of the clearing permit application area was not included in the reconnaissance survey area (NVS, 2019a). However, the additional area was covered by a subsequent targeted survey for conservation significant flora and malleefowl mounds, conducted by NVS in September 2019 (NVS, 2019b).

No Threatened flora, Priority flora, Threatened Ecological Communities (TECs) or Priority Ecological Communities (PECs) have been recorded within the application area (GIS Database). No Threatened Flora, TECs or PEC's were found during the reconnaissance flora and vegetation survey (NVS, 2019a). One plant of Priority flora species *Eremophila praecox* (P1) was recorded during the reconnaissance survey, located outside of the clearing permit application area (NVS, 2019a). The targeted survey of the 24 hectare area not covered by the reconnaissance survey, did not identify any conservation significant flora species or communities (NVS, 2019b).

The vegetation condition within the survey area was described as Very Good to Degraded on the Keighery scale with the majority of the survey area considered to be in Good condition (NVS, 2019a). A relatively small section of the application area had suffered previous disturbance from mineral exploration activities and was rated as Degraded (NVS, 2019a). The three vegetation communities recorded during the flora survey are all common and widespread in the Eastern Goldfields IBRA subregion, and no unique or restricted vegetation communities were recorded within the survey area (NVS, 2019a).

Several weed species were recorded during the flora survey: *Centaurea melitensis* (Maltese Cockspur); *Citrullus amarus* (Pie Melon); *Cucumis myriocarpus* (Prickly Paddy Melon); *Dittrichia graveolens* (Stinkwort); *Mesembryanthemum nodiflorum* (Slender Iceplant); *Sonchus oleraceus* (Common Sowthistle); and *Salvia verbenaca* (Wild Sage) (NVS, 2019a). None of these weeds are listed as a declared plant under the *Biosecurity and Agriculture Management Act 2007* (NVS, 2019a). 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.

The vegetation associations, fauna habitats and landform types present within the application area, are well represented in surrounding areas (NVS, 2019a; 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)
DEC (2010)
NVS (2019a)
NVS (2019b)

GIS Database:
- IBRA Australia
- Pre-European Vegetation
- Threatened and Priority Ecological Communities Boundaries

- Threatened and Priority Ecological Communities Buffers
- Threatened and Priority Flora
- Threatened Fauna

(b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.

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

A vertebrate fauna survey was conducted over the majority (approximately 119 hectares) of the clearing permit application area on 6 June 2019 (Terrestrial Ecosystems, 2019).

The following fauna habitats were recorded within the survey area (Terrestrial Ecosystems, 2019):

- Open shrubland over grasses of varying densities on a stony sandy-clay or sandy-clay substrate; and
- Eucalypt woodland over chenopod and mulga shrubland over scattered grasses of varying densities on a sandy-clay substrate.

The condition of the fauna habitats varied across the survey area, from highly degraded to very good, with the more degraded areas suffering disturbance from recent mineral exploration activity and grazing from cattle and rabbits (Terrestrial Ecosystems, 2019).

Several fauna species (mostly birds) of conservation significance have the potential to occur within the application area, however most fauna species occurring in the region tend to be wide ranging (CALM, 2002; Terrestrial Ecosystems, 2019). Terrestrial Ecosystems (2019) reported that the proposed clearing is unlikely to have a significant impact on any conservation significant fauna species.

Malleefowl (*Leipoa ocellata*) (Vulnerable) previously inhabited much of the Goldfields region, however their range and abundance is now greatly reduced. Database searches recorded the Malleefowl as likely to occur within the area, based on previous records (Terrestrial Ecosystems, 2019). The application area was searched for Malleefowl mounds by Terrestrial Ecosystems (2019) and NVS (2019b). One very old, extinct Malleefowl mound was recorded within the application area, however, there are no recent records of active breeding mounds in the vicinity of the application area (NVS, 2019b; Terrestrial Ecosystems, 2019). The vegetation within the application area is considered unlikely to support Malleefowl breeding, as it is generally not dense enough (Terrestrial Ecosystems, 2019). There is the potential for Malleefowl to forage in the area, however the proposed clearing will have minimal impact on the availability of foraging habitat in the region, as extensive areas of similar habitat occur outside of the application area (Terrestrial Ecosystems, 2019; GIS Database).

Terrestrial Ecosystems (2019) concluded that potential impacts on vertebrate fauna from the proposed clearing are likely to be low, in a landscape or bioregional context, as vast tracts of similar habitat occurs in adjacent areas.

The landforms and habitat types found within the application area are common and widespread in the region (Terrestrial Ecosystems, 2019; GIS Database). The vegetation proposed to be cleared is unlikely to represent significant habitat for fauna in a regional context.

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

Methodology CALM (2002)
NVS (2019b)
Terrestrial Ecosystems (2019)

GIS Database:
- Imagery
- Pre-European Vegetation
- Threatened Fauna

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

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

There are no known records of Threatened flora within the application area (GIS Database). Flora surveys of the application area did not record any species of Threatened flora (NVS, 2019a; 2019b).

The vegetation associations within the application area are common and widespread within the region (NVS, 2019a; 2019b; GIS Database), and the vegetation proposed to be cleared is unlikely to be necessary for the continued existence of any species of Threatened (rare) flora.

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

Methodology NVS (2019a)
NVS (2019b)

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 (NVS, 2019a; 2019b).

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

Methodology NVS (2019a)
 NVS (2019b)

GIS Database:
 - Threatened and Priority Ecological Communities Boundaries
 - Threatened and Priority Ecological Communities Buffers

(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

Comments **Proposal is not at variance to this Principle**
 The application area falls within the Coolgardie Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 97% of the pre-European vegetation still exists in the IBRA Coolgardie Bioregion (Government of Western Australia, 2019). The application area is broadly mapped as Beard vegetation associations 468: Medium woodland; salmon gum and goldfields blackbutt; and 540: Succulent steppe with open low woodland; sheoak over saltbush (GIS Database). Approximately 97-98% 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 – Coolgardie	12,912,204	12,648,491	~97	Least Concern	~16
Beard vegetation associations – WA					
468	592,022	583,902	~98	Least Concern	~23
540	202,423	200,158	~98	Least Concern	~28
Beard vegetation associations – Coolgardie Bioregion					
468	583,357	575,360	~98	Least Concern	~22
540	75,810	73,619	~97	Least Concern	no data

* 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 (GIS Database). One minor ephemeral drainage line passes 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 (CALM, 2002). None of the vegetation recorded during the vegetation survey of the application area was considered to be riparian vegetation (NVS, 2019a).

Based on the above, the proposed clearing is at variance to this Principle. However, impacts to vegetation growing in association with the ephemeral watercourse are expected to be minimal.

Methodology CALM (2002)
NVS (2019a)

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 soil of the application area is broadly mapped as soil type BB5 (Northcote et al., 1960-68; GIS Database). This soil type is described as: Rocky ranges and hills of greenstones - basic igneous rocks: chief soils seem to be shallow calcareous loamy soils and similar soils, with shallow brown and grey-brown calcareous earths below which weathered rock occurs at shallow depths (Northcote et al., 1960-68).

The Commissioner of Soil and Land Conservation has advised that the application area is likely to represent several land units of the Gumland land system (DPIRD, 2020). Soils of the application area are likely to be red loamy earths or duplex soils, supporting scattered Eucalypt woodland with a chenopod understorey (DPIRD, 2020). The application area is located on a relatively flat plain with a slope across the site estimated at approximately 1.5 percent, and the soils are not generally prone to soil erosion (DPIRD, 2020; GIS Database). However, removal of vegetation and disturbance of the protective stony mantles may result in water erosion if surface water is not appropriately managed (DPIRD, 2020).

The application area is relatively flat, there are no permanent watercourses or waterbodies in the application area and the region receives a relatively low annual rainfall (GIS Database). Therefore the risk of wind and water erosion is likely to be low during normal weather conditions.

Although the removal of vegetation cover may result in localised erosion, 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 DPIRD (2020)
Northcote et al., (1960-68)

GIS Database:
- Hydrography, Lakes
- Hydrography, linear
- Landsystem Rangelands
- 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 (formerly DPaW) managed land is the former Credo Pastoral Lease which is located approximately 29 kilometres west-northwest of the application area, at its nearest point (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). One minor non-perennial watercourse passes through the north-eastern corner of the application area (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, Lakes
- 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 is semi-arid, with a low average rainfall of approximately 200-300 millimetres per year (CALM, 2002). Drainage lines in the area are dry for most of the year, only flowing briefly immediately following significant rainfall (CALM, 2002).

There are no permanent water courses or waterbodies within the application area (GIS Database). One seasonal drainage line passes through a corner of the application area and temporary localised flooding may occur briefly following heavy rainfall events. However, the proposed clearing is unlikely to increase the incidence or intensity of natural flooding events.

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

Methodology CALM (2002)

GIS Database:
- Hydrography, lakes
- Hydrography, linear

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

Comments

The clearing permit application was advertised on 6 January 2020 by the Department of Mines, Industry Regulation and Safety (DMIRS), inviting submissions from the public. No submissions were received in relation to this application.

There are two native title claims (WC2017/001; WC2017/007) over the area under application (DPLH, 2020). These claims have been registered with the National Native Title Tribunal on behalf of the claimant groups. However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are no registered Aboriginal Sites of Significance within the application area (DPLH, 2020). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of Water and Environmental Regulation and the Department of Biodiversity, Conservation and Attractions, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

Methodology DPLH (2020)

4. References

- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- DEC (2010) A Biodiversity and Cultural Conservation Strategy for the Great Western Woodlands Strategy. Department of Environment and Conservation, Western Australia.
- DPLH (2020) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage.
<http://maps.daa.wa.gov.au/AHIS/> (Accessed 17 February 2020).
- Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.
- DPIRD (2020) Advice received in relation to Clearing Permit Application CPS 8756/1. Commissioner of Soil and Land Conservation, Department of Primary Industries and Regional Development, Western Australia, January 2020.
- Government of Western Australia (2019) 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions, Perth.
<https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics>
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Northcote, K.H., 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.
- NVS (2019a) Reconnaissance Flora and Vegetation Survey of the Tuart and Rose Dam South Gold Projects – June 2019. Report prepared for Norton Gold Fields Ltd, by Native Vegetation Solutions, August 2019.
- NVS (2019b) Threatened Flora and Malleefowl Mound Targeted Search September 2019: Rose Dam South Mining Project. Report prepared for Norton Gold Fields Ltd, by Native Vegetation Solutions, September 2019.
- Terrestrial Ecosystems (2019) Vertebrate Fauna Risk Assessment for the Rose South Project Area. Report prepared for Native Vegetation Solutions, by Terrestrial Ecosystems, August 2019.

5. Glossary

Acronyms:

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)
DBCA	Department of Biodiversity, Conservation and Attractions, Western Australia
DEC	Department of Environment and Conservation, Western Australia (now DBCA and DWER)
DoEE	Department of the Environment and Energy, Australian Government
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)
DPIRD	Department of Primary Industries and Regional Development, Western Australia
DPLH	Department of Planning, Lands and Heritage, Western Australia
DRF	Declared Rare Flora
DoE	Department of the Environment, Australian Government (now DoEE)
DoW	Department of Water, Western Australia (now DWER)
DPaW	Department of Parks and Wildlife, Western Australia (now DBCA)
DSEWPac	Department of Sustainability, Environment, Water, Population and Communities (now DoEE)
DWER	Department of Water and Environmental Regulation, Western Australia
EPA	Environmental Protection Authority, Western Australia
EP Act	<i>Environmental Protection Act 1986</i> , 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.