

## **Clearing Permit Decision Report**

## 1. Application details

1.1. Permit application details

Permit application No.: 8519/1

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Silver Lake (Integra) Pty Ltd

1.3. Property details

Property: Mining Lease 25/347
Local Government Area: City of Kalgoorlie-Boulder
Colloquial name: Mt Monger Project

1.4. Application

Clearing Area (ha)No. TreesMethod of ClearingFor the purpose of:100Mechanical RemovalTailings Storage Facility

1.5. Decision on application

**Decision on Permit Application:** Grant

Decision Date: 15 August 2019

## 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: 468: Medium woodland; salmon gum and goldfields blackbutt (GIS Database).

A flora and vegetation survey was conducted over the application area and surrounding area by Outback Ecology during 2008. The following seven vegetation associations were recorded within the application area (Outback Ecology, 2009a):

#### **FCM**

Frankenia georgei, F. pauciflora, Cratystylis subspinescens, Maireana amoena, M. pyramidata, Roycea divaricata, Tecticornia spp. open low heath;

### EgSa

Eucalyptus griffithsii woodland over Senna artemisioides subsp. filifolia, Eremophila decipiens subsp. decipiens open heath / shrubland over scattered low shrubs;

#### EsE

Eucalyptus salmonophloia (E. lesoufii) scattered trees to woodland over Senna artemisioides subsp. filifolia, Acacia colletioides shrubland / tall shrubland over scattered low shrubs;

#### Ab

Acacia burkittii, Eremophila oldfieldii subsp. oldfieldii tall open shrubland over Eremophila gibbosa, Dodonaea lobulata open shrubland over scattered herbs;

#### MpAn

Myoporum platycarpum low open woodland over Atriplex nummularia subsp. spathulata scattered tall shrubs over Maireana sedifolia low shrubland:

#### DvS

Dodonaea viscosa subsp. angustissima shrubland over Senna artemisioides subsp. filifolia, Tecticornia disarticulata, Maireana sedifolia low shrubland; and

#### EoS

Eremophila oldfieldii subsp. oldfieldii scattered tall shrubs over Senna artemisioides subsp. filifolia, Eremophila glabra subsp. glabra, Dodonaea lobulata shrubland.

### **Clearing Description**

## Mt Monger Project.

Silver Lake (Integra) Pty Ltd proposes to clear up to 100 hectares of native vegetation within a boundary of approximately 989 hectares, for the construction of a tailings storage facility. The project is located approximately 65 kilometres south east of Boulder, within the City of Kalgoorlie-Boulder.

#### **Vegetation Condition**

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

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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 Outback Ecology (2009a).

Uncontrolled grazing from cattle and feral goats and mining activity has impacted the vegetation within the application area (Outback Ecology, 2009a).

The application area is immediately adjacent to an operational mine site (GIS Database).

## 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 interrupted in the west with low hills and ridges of Archaean greenstone in the east. A series of large playa lakes in the western half are the remnants of an ancient drainage system. The vegetation is of Mallees, Acacia thickets and shrub heaths on sandplains (CALM, 2002).

A flora survey conducted by Outback Ecology in June and October 2008, recorded a total of 118 flora species, from 60 genera, and 29 families (Outback Ecology, 2009).

There are no records of Threatened flora or Priority flora within the application area. There is one record of Priority flora, *Eucalyptus websteriana* subsp. *norsemanica* (Priority 1), approximately 35 metres from the application area at nearest point (GIS Database). The distribution area for this species extends into the adjacent Coolgardie and Dundas local government areas (Western Australian Herbarium, 1988 -2019). (As the *Eucalypts websteriana* subsp. *norsemanica* (Priority 1) is outside the application area and its distribution area extends into other regions (Western Australian Herbarium, 1988 -2019), the proposed clearing is unlikely to impact the conservation status of this species.

Priority flora *Frankenia georgei* (Priority 1) is recorded as present in vegetation association FCM: *Frankenia georgei*, *F. pauciflora*, *Cratystylis subspinescens*, *Maireana amoena*, *M. pyramidata*, *Roycea divaricata*, *Tecticornia spp.* open low heath (Outback Ecology, 2009; Western Australian Herbarium, 1988-2019). However, while *Frankenia georgei* (Priority 1) was recorded in the broader survey area in quadrats approximately 2 kilometres to the south of the application area; it was not recorded in the quadrats within the application area or in the immediate vicinity of the application area (Outback Ecology 2009). This species has been recorded from the Coolgardie and Murchison IBRA region (Western Australian Herbarium, 1988 -2019). Therefore, clearing within the application area is unlikely to impact the conservation status of this species.

The vegetation association mapped as Salt Creek EoS; *Eremophila oldfieldii* subsp. *oldfieldii* scattered tall shrubs over *Senna artemisioides* subsp. *filifolia*, *Eremophila glabra* subsp. *glabra*, *Dodonaea lobulata* shrubland, is situated on a greenstone hill within the application area. Greenstone ranges are considered of interest within the Coolgardie region due to high levels of biodiversity (Outback Ecology, 2009a). There is an extensive greenstone belt approximately 100 kilometres to the east of the application area (Outback Ecology, 2009a), therefore, potentially a significant area of interest. The greenstone hill within the application comprises approximately 2% of the application area (GIS Database). Therefore, potential impacts to the vegetation association growing on the greenstone hill is considered to be minimal.

A fauna survey was conducted over a broader survey area by Outback Ecology Services in November 2008 (Outback Ecology, 2009b). The survey recorded 40 reptile species, 14 mammals (10 native and four non-native species), and 57 bird species (Outback Ecology, 2009b). One Priority fauna species *Platycercus icterotis xanthogenys* (Western Rosella) (Priority four) was recorded within the application area (Outback Ecology, 2009a). However, the proposed project is unlikely to have a significant impact on the Western Rosella as avifauna are highly mobile, and this species utilises woodlands and shrublands as habitat. Woodland habitats are available in the area surrounding the application area (Outback Ecology, 2019b).

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

Outback Ecology (2009a) Outback Ecology (2019b)

#### GIS Database:

- IBRA Australia
- Imagery
- Pre-European Vegetation
- Threatened and Priority Flora
- Threatened and Priority Outback Ecology Communities Boundaries
- Threatened and Priority Outback Ecology Communities Buffers
- Threatened Fauna
- Topographic Contours, Statewide

## (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 may be at variance to this Principle

The following six fauna habitats have been recorded within the survey area (Outback Ecology, 2009b):

- Chenopod shrubland on river flat;
- 2. Mallee woodland on greenstone hill;
- 3. Mallee woodland over Spinifex:
- 4. Blackbutt (Eucalyptus lesouefii) over open shrubland;
- 5. Salmon Gum (Eucalyptus salmonophloia) woodland over open shrub; and
- 6. Open Mallee woodland over saltbush.

A desktop study and habitat assessment was used to determine potential habitat for conservation significant species (Outback Ecology, 2009b). Conservation significant species may occur within the application area, including Malleefowl (*Leipoa ocellata*) Threatened (VU); Forktailed swift (*Apus pacificus*) (MI); Peregrine Falcon (*Falco peregrinus*) (OS); and Western Spiny-tailed Skink (*Egernia stokesii badia*) (VU) (Outback Ecology, 2009b). However, no fauna of conservation significance were recorded within the application area during the survey (Outback Ecology, 2009b).

There is a record of an old Malleefowl mound occurring within Randalls Timber Reserve which is located approximately 10 kilometres northeast of the application area (Outback Ecology, 2009b). Though, there is no evidence of recent occupation (Outback Ecology, 2009b). A desktop study found records of Malleefowl within 5 kilometres of the application area (Naturemap, 2019). Malleefowl utilise habitats consisting of various Eucalypt species; suitable habitat for the Malleefowl exists in Randalls Timber Reserve (Outback Ecology, 2009b). Eucalypt woodlands are widely represented throughout the region (Outback Ecology, 2009b). Therefore, the proposed clearing is unlikely to impact significant habitat for Malleefowl.

The fauna habitats in the application area appear to be widespread, and present outside the project area, and show signs of degradation consistent with the activities of feral animals, and are not considered to be significant habitat for fauna.

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

#### Methodology

Outback Ecology (2009b) Naturemap (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 Pro

### 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 (Outback Ecology, 2009a).

The vegetation associations within the application area are common and widespread within the region (Outback Ecology, 2009a; 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

Outback Ecology (2009a)

#### 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 Outback Ecology community.

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

There are no known Threatened Ecological Communities (TECs) located within the application area. The nearest TEC; Mount Belches *Acacia quadrimarginea / Ptilotus obovatus* (banded ironstone formation), is approximately 10 kilometres to the east of the application area at its nearest point (GIS Database).

A flora and vegetation survey of the application area did not identify any TECs (Outback Ecology, 2009a).

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

## Methodology Outback Ecology (2009a)

GIS Database:

- Threatened and Priority Outback Ecology Communities Boundaries
- Threatened and Priority Outback Ecology 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 (GIS Database). Approximately 98% of the pre-European extent of this vegetation association remains uncleared.

	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	599,022	583,902	~98	Least Concern	22
Beard vegetation associations  – Coolgardie Bioregion					
468	583,357	575,360	~98	Least Concern	22

<sup>\*</sup> Government of Western Australia (2019)

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

<sup>\*\*</sup> Department of Natural Resources and Environment (2002)

## (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 seasonal creek line passes through the application area (GIS Database).

The creekline within the application area feeds into a large a non-perennial salt lake approximately 2 kilometres to the south west of the application area at its nearest point (Outback Ecology, 2009a; GIS Database).

The vegetation association FCM: Frankenia georgei, F. pauciflora, Cratystylis subspinescens, Maireana amoena, M. pyramidata, Roycea divaricata, Tecticornia spp. open low heath, follows the creekline, however none the vegetation nor vegetation associations recorded during the vegetation survey are described as growing in association with watercourses or wetlands (Outback Ecology, 2009a). Potential impacts to vegetation growing in association with the watercourse may be minimised by the implementation of a watercourse management condition.

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

## Methodology Outback Ecology (2009a)

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

There is minimal variation between contours across the application area, indicating that the application area is relatively flat (GIS Database). Therefore, there is little slope to influence the movement of soil and water, and hence cause erosion.

Soil mapping of the application area defines the north west corner of the application area as gently undulating valley plains and pediments; some outcrop of basic rock and chief soils are alkaline red earths with limestone or limestone nodules at shallow depth on gently sloping, slightly concave, plains with low gentle rises, some soils are associated soils on steeper slopes; and some breakaways (Northcote, K. H. et al.,1960-68).

The soil mapping describes the remainder of the application area as rocky ranges and hills of greenstone, basic igneous rocks, and soils are predominately shallow calcareous loamy soils (Northcote, K. H. et al., 1960-68).

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

## Methodology Northcote, K. H. et al. (1960-68)

GIS Database:

- Landsystem Rangelands
- Soils, Statewide
- Topographical 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) proposed managed land is the Randall Timber Nature Reserve which is located approximately 10 kilometres east 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). 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

- 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 is semi-arid, with a low average rainfall at the nearest weather station, at Kalgoorlie-Boulder Airport, of approximately 267 millimetres per year (BoM, 2019). Drainage lines in the area are dry for most of the year, only flowing briefly immediately following significant rainfall (Outback Ecology, 2009a).

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 very high rainfall events (Outback Ecology, 2009a). 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

BoM (2019)

Outback Ecology (2009a)

GIS Database:

- Hydrographic Catchments Catchments
- Hydrography, linear

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

#### Comments

The clearing permit application was advertised on 17 June 2019 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 no native title claims over the area under application (DPLH, 2019). 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, 2019). 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 (2019)

## 4. References

BoM (2019) Bureau of Meteorology Website – Climate Data Online, Kalgoorlie-Boulder Airport. Bureau of Meteorology. <a href="http://www.bom.gov.au/climate/data/">http://www.bom.gov.au/climate/data/</a> (Accessed 05 August 2019).

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 (2019) Aboriginal Heritage Enquiry System. Department of Planning, Lands and Heritage. <a href="http://maps.daa.wa.gov.au/AHIS/">http://maps.daa.wa.gov.au/AHIS/</a> (Accessed 8 August 2019).
- 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. <a href="https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics">https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics</a>
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Naturemap (2019) NatureMap Mapping Western Australia's biodiversity. Department of Biodiversity, Conservation and Attractions <a href="https://naturemap.dbca.wa.gov.au/">https://naturemap.dbca.wa.gov.au/</a> (Accessed 13 August 2019)
- Outback Ecology (2019a) Salt Creek level 2 and Maxwells /Cockeyed Bob Level 1 Vegetation and Flora Surveys, Report prepared for Integra Mining Limited, by Outback Ecology, April 2009.
- Outback Ecology (2019b) Terrestrial Vertebrate Fauna Assessment. Report prepared for Integra Mining Limited, by Outback Ecology Services. January 2009.
- Western Australian Herbarium (1998-2019) FloraBase the Western Australian Flora. Department of Biodiversity, Conservation and Attractions. https://florabase.dpaw.wa.gov.au/ (Accessed 8 August 2019).

#### 5. Glossary

#### Acronyms:

**BoM** Bureau of Meteorology, Australian Government

DAA
 Department of Aboriginal Affairs, Western Australia (now DPLH)
 DAFWA
 DECA
 Department of Agriculture and Food, Western Australia (now DPIRD)
 Department of Biodiversity, Conservation and Attractions, Western Australia

DEC Department of Environment and Conservation, Western Australia (now DBCA and DWER)

DEE 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 DEE)

**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 DEE)

**DWER** Department of Water and Environmental Regulation, Western Australia

EPA Environmental Protection Authority, Western Australia
EP Act Environmental Protection Act 1986, 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 Outback Ecology Community, Western Australia
RIWI Act Rights in Water and Irrigation Act 1914, Western Australia

TEC Threatened Outback Ecology 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.