

## **Clearing Permit Decision Report**

## 1. Application details

1.1. Permit application details
Permit application No.: 9285/

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Mobile Concreting Solutions Pty Ltd

1.3. Property details

Property: Mining Lease 08/272
Local Government Area: Shire of Ashburton
Colloquial name: Range Quarry Project

1.4. Application

Clearing Area (ha) No. Trees Method of Clearing For the purpose of: 30 Mechanical Removal Mineral Production

1.5. Decision on application

Decision on Permit Application: Gra

Decision Date: 22 July 2021

## 2. Site Information

#### 2.1. Existing environment and information

2.1.1.Description of the native vegetation under application

**Vegetation Description** 

The vegetation of the application area is broadly mapped as the following Beard vegetation association: 585: Mosaic: Shrublands; snakewood & *Acacia victoriae* scrub / Hummock grasslands, shrub-steppe; kanji over soft spinifex & *Triodia basedowii* (GIS Database).

A flora and vegetation survey was conducted over the application area by Botanica Consulting on 15 June 2007. One vegetation association was recorded within the application area (Botanica Consulting, 2007):

Acacia low open woodland - Acacia species were dominant in the upperstorey of the survey area, including Acacia ancistrocarpa, A. bivenosa, A. inaequilatera, A. synchronicia, A. trachycarpa and A. xiphophylla. Other upperstorey species include Hakea lorea ssp. lorea and Corymbia zygophylla. Understorey species include Ptilotus astrolasius var. astrolasius, Mukia maderaspatana, Euphorbia australis, Senna glutinosa ssp. pruinosa, S. notabilis, Cleome viscosa, Maireana georgei, Bonamia rosea, Sida rohlenae ssp. rohlenae, Cullen leucochaites, Rhynchosia minima, Tephrosia uniovulata, Aristida holathera var. holathera, Eragrostis dielsii, E. eriopoda, Triodia lanigera, Solanum diversiflorum, S. lasiophyllum and Triumfetta chaetocarpa.

A further reconnaissance field survey was conducted over the application area by Newman (2011) between 7 and 9 May 2011. One vegetation association was recorded within the application area (Newman, 2011):

Open Corymbia Woodland - Emergent *Corymbia zygophylla* and *Acacia ancistrocarpa, Acacia bivenosa* and *Acacia inaequilatera* sparse low open woodland over *Senna artemisioides* subsp. *oligophylla, Senna artemisioides* subsp. *helmsii* and *Acacia trachycarpa* mixed shrubs and *Aristida holathera* subsp. *holathera, Enneapogon caerulescens, Triodia wiseana, Triodia basedowii* and *Triodia lanigera* hummock grassland.

Clearing Description Range Quarry Project.

Mobile Concreting Solutions Pty Ltd proposes to clear up to 30 hectares of native vegetation within a boundary of approximately 119.9 hectares, for the purpose of mineral production. The project is located approximately 70 kilometres south-east of Onslow, within the Shire of Ashburton.

Vegetation Condition Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate

(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 Botanica Consulting (2007) and

Newman (2011).

The proposed clearing of native vegetation is to facilitate the quarry expansion, and to relocate screening and stockpiling areas as the quarry expansions occur.

## 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 occurs within the Roebourne subregion of the Pilbara Interim Biogeographic Regionalisation for Australia bioregion (GIS Database). This subregion is characterised by quaternary alluvial and older colluvial coastal and subcoastal plains with a grass savannah of mixed bunch and hummock grasses, and dwarf shrub steppe of *Acacia stellaticeps* or *Acacia pyrifolia* and *Acacia inaequilatera*. Uplands are dominated by Triodia hummock grasslands (CALM, 2002). Ephemeral drainage lines support *Eucalyptus victrix* or *Corymbia hamersleyana* woodlands. Samphire, Sporobolus and mangal occur on marine alluvial flats and river deltas (CALM, 2002).

There were two flora and vegetation surveys undertaken over the application area by Botanica Consulting (2007) and Newman (2011). The surveys by both Botanica Consulting and Newman were undertaken outside the recommended survey period, however Botanica Consulting estimates that approximately 90% of the flora taxa within the survey area was recorded (Botanica Consulting, 2007).

No Threatened or Priority Flora species were recorded within the application area (Botanica Consulting, 2007; Newman, 2011), and no Threatened or Priority Ecological Communities were identified within the application area (GIS Database).

There are two Priority flora species that occur within the local area; *Helichrysum oligochaetum* (Priority 1) and *Triumfetta echinata* (Priority 3) (DBCA, 2007-). The preferred habitat for both species was not observed during the flora and vegetation survey (Newman, 2011). The preferred habitat of *Triumfetta echinata* could describe much of the substrate of the application area, however other co-occurring vegetation that this species requires was not identified within the application area (Newman, 2011). The proposed clearing is not likely to impact the conservation status of *Helichrysum oligochaetum* or *Triumfetta echinata*.

Newman (2011) noted high disturbance in a localised area surrounding the pre-existing drilling areas. The native vegetation in these intensively worked areas was assessed as being in 'poor' condition due to a higher abundance of weeds, namely Buffel Grass (*Cenchrus ciliaris*) and some *Portulaca oleracea* (Purslane). The rest of the application area was assessed as being in 'good' condition (Keighery, 1994; Newman, 2011).

The vegetation associations, fauna habitats and landform types present within the application area, are well represented in surrounding areas (Botanica Consulting, 2007; Davis, 2011; Newman, 2011; GIS Database). The application area is unlikely to represent an area of higher biodiversity than surrounding areas, in either a local or regional context.

There were several weeds identified within the application area (Newman, 2011). Weeds have the potential to alter the biodiversity of an area, competing with native vegetation for available resources and making areas more fire prone. Care should be taken to ensure that weeds do not get introduced into the area as the result of clearing activities. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

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

#### Methodology

Botanica Consulting (2007)

CALM (2002)

Davis (2011)

DBCA (2007-)

Keighery (1994)

Newman (2011)

#### GIS Database:

- IBRA Australia
- Pre-European Vegetation
- Threatened and Priority Ecological Communities Boundaries
- Threatened and Priority Ecological Communities Buffers
- Threatened Fauna

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

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

A level 1 fauna survey was conducted over the application area on 8 and 9 June 2011. Two faunal habitats were identified during the survey (Davis, 2011):

#### Sparse open shrubland over Triodia:

This was the dominant fauna habitat present. The substrate was mostly sandy in nature with occasional scattered gravel on the surface in places. Spinifex at the time of the inspection was benefitting from recent rains and was dense and green with plentiful seed available. This habitat is likely to prove ideal for small burrowing and spinifex-inhabiting reptiles and small mammals; and

#### **Disturbed Lowlands:**

Lowland habitats in a number of places have been extensively disturbed by past mining activities. Disturbance is manifested as large areas of exposed ground and fragmentation of vegetation by tracks. However, disturbance was generally confined to small areas and overall the extent of weed invasion was low.

There are five conservation significant fauna species that are likely to occur within the application area based on suitable habitat types (DBCA, 2007-; Davis, 2011; GIS Database):

- Grey Falcon (Falco hypoleucos) (VU);
- Mulgara (Dasycercus blythi) (Priority 4);
- Western Pebble-mound Mouse (Pseudomys chapmani) (Priority 4);
- Peregrine Falcon (Falco peregrinus) (OS); and
- Rainbow Bee-eater (Merops ornatus) (MI).

The Grey Falcon has been recorded within the regional area, and since this species is relatively wide-ranging, it may occur within the application area. Davis (2011) states that this species generally prefers lightly wooded country, and given that this habitat type does not occur in the local area, it is not likely that the application area would be considered significant for this species.

Sandy soils were present within the application area, and these were mostly on loamy flats, not on the low dunes preferred by the Mulgara (Davis, 2011). The Mulgara is not likely to occupy the faunal habitats within the application area.

The Peregrine Falcon is a widespread bird of prey and had been recorded in other fauna surveys in the nearby area (Davis, 2011). This species may utilise the application area as foraging habitat, however it is unlikely that the proposed clearing will significantly impact habitat availability for this species.

Davis (2011) suggests that the Western Pebble-mound mouse was historically present within the local area as evidenced by the presence of two disused (non-active) mounds on an adjacent mining tenement. Despite further extensive searches of suitable habitat in the surrounding area, no further evidence of the Western Pebble-mound Mouse was found. The application area is not likely to be significant habitat for this species.

The Rainbow Bee-eater is a highly mobile, widespread bird that occurs in numerous habitats including those which occur within the application area (Davis, 2011). The application area may provide suitable habitat for this species, however, it is unlikely that the proposed clearing will significantly impact habitat availability for this species.

There were no significant faunal habitat features within the application area (Davis, 2011).

Given the general lack of unique landforms in Mining Lease 08/272 and representation of habitat throughout the surrounding region, it is unlikely that the proposed clearing area comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna.

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

#### Methodology

Davis (2011) DBCA (2007-)

GIS Database:

- Imagery
- Pre-European Vegetation
- Threatened Fauna

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

#### Comments

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

There are no known records of Threatened flora within the application area (GIS Database). Flora surveys of the application area did not record any species of Threatened flora (Botanica Consulting, 2007; Newman, 2011).

The vegetation associations within the application area are common and widespread within the region (Botanica Consulting, 2007; Newman, 2011; GIS Database), and the vegetation proposed to be cleared is unlikely to be necessary for the continued existence of any species of Threatened flora.

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

#### Methodology

Botanica Consulting (2007)

Newman (2011)

#### GIS Database:

- Imagery
- 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).

Flora and vegetation surveys of the application area did not identify any TECs (Botanica Consulting, 2007; Newman, 2011).

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

#### Methodology

Botanica Consulting (2007)

Newman (2011)

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 Pilbara Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 99% of the pre-European vegetation still exists in the IBRA Pilbara Bioregion (Government of Western Australia, 2019). The application area is broadly mapped as Beard vegetation association 585 (GIS Database). Approximately 99% of the pre-European extent of this vegetation association 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.

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

#### Methodology

Government of Western Australia (2019)

GIS Database:

- IBRA Australia
- Pre-European Vegetation

## (f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

#### Comments

## Proposal is not at variance to this Principle

There are no watercourses or wetlands within the area proposed to clear (GIS Database). There was no riparian vegetation identified within the application area (Botanica Consulting, 2007; Newman, 2011).

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

## Methodology

Botanica Consulting (2007)

Newman (2011)

GIS Database:

- Hydrography, Lakes
- Hydrography, linear

## (g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

#### Comments

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

The application area lies within the Uaroo and Stuart land systems (GIS Database). These land systems have been mapped and described in technical bulletins produced by the former Department of Agriculture (now the Department of Primary Industries and Regional Development).

The Uaroo land system is described as broadly sandy plains supporting shrubby hard and soft spinifex grasslands (Van Vreeswyk et al., 2004). This land system is generally not susceptible to erosion, however some erosion is present on drainage tracts (Van Vreeswyk et al., 2004).

The Stuart land system consists of gently undulating stony plains supporting hard and soft spinifex grasslands and snakewood shrublands (Van Vreeswyk et al., 2004). This land system is generally resistant to erosion except for some lower plains and drainage tracts which are slightly to moderately susceptible (Van Vreeswyk et al., 2004).

Given that there are no drainage tracts within the application area (GIS Database), the proposed clearing of native vegetation is unlikely to cause appreciable land degradation.

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

#### Methodology

Van Vreeswyk et al. (2004)

GIS Database:

- Hydrography, linear
- Landsystem Rangelands
- Soils, Statewide

## (h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

#### Comments

#### Proposal may be at variance to this Principle

The application area is located wholly within the DBCA managed land Cane River Conservation Park (GIS Database).

The proposed clearing is localised and involves the expansion of an existing quarry. DBCA (2021) advise that Kapok (*Aerva javanica*) has been observed in high densities across the existing mine site, and there are currently small incursions outside the existing cleared areas. Buffel grass (*Cenchrus ciliaris*) was also evident within the existing disturbed footprint (DBCA, 2021). There is potential that the proposed clearing activities could result in the introduction or spread of weeds into adjacent vegetation, which could impact on the conservation values of the Cane River Conservation Park.

The proposed clearing will not sever any ecological connectivity within the Cane River Conservation Park (GIS Database).

Based on the above, the proposed clearing may be at variance to this Principle. However, potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition to manage the existing weed occurrences and prevent the spread of weeds into any newly cleared areas and the surrounding native vegetation.

## Methodology

DBCA (2021)

GIS Database:

- DPaW Tenure
- Imagery

## (i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

#### Comments

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

There are no Public Drinking Water Source Areas within or in close proximity to the application area (GIS Database). There are no permanent watercourses or wetlands within the area proposed to clear (GIS Database). Creek lines in the region are dry for most of the year, only flowing briefly immediately following significant rainfall. The proposed clearing is unlikely to result in significant changes to surface water flows.

The proposed clearing is unlikely to cause deterioration in the quality of underground water.

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

#### Methodology GIS Database:

- Hydrography, Linear
- Imagery
- 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 in which the clearing is proposed is arid (semi-desert) tropical with highly variable rainfall, falling mainly in summer (CALM, 2002). Drainage lines in the area are dry for most of the year, only flowing briefly immediately following significant rainfall (GIS Database).

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. 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:

- Hydrographic Catchments Catchments
- Hydrography, linear
- Imagery

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

#### Comments

The clearing permit application was advertised on 14 June 2021 by the Department of Mines, Industry Regulation and Safety (DMIRS), inviting submissions from the public. No submissions were received in relation to this application.

There is one native title claim over the area under application (DPLH, 2021). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are no registered Aboriginal Sites of Significance within the application area (DPLH, 2021). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

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

#### Methodology DPLH (2021)

#### 4. References

- Botanica Consulting (2007) Flora and Vegetation Survey of the Turtle and Range Projects (M08/272 & M08/273). Prepared for Onslow Metals Pty Ltd, by Jim's Seeds, Weeds and Trees Pty Ltd T/A Botanica Consulting, June 2007.
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- Davis, R (2011) Vertebrate Fauna Desktop Assessment for Cane River proposed exploration area, Onslow, WA. Prepared for Keith Lindbeck and Associates, by Egernia Environmental, June 2011.
- DBCA (2007-) 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 15 June 2021).
- DBCA (2021) Advice received in relation to Clearing Permit Application CPS 9285/1. Species and Communities Branch, Department of Biodiversity, Conservation and Attractions, Western Australia, July 2021.
- DPLH (2021) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <a href="https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS">https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS</a> (Accessed 15 June 2021).

- Government of Western Australia (2019) 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions, Perth. <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.
- Newman (2011) Onslow Metals Turtle and Range Deposits Level 1 Flora Survey. Report prepared by Belinda Newman, June 2011.
- Van Vreeswyk, A.M.E., Payne, A.L., Leighton, K.A. and Hennig, P. (2004) An inventory and condition survey of the Pilbara Region, Western Australia. Technical Bulletin No. 92. Department of Agriculture, South Perth, Western Australia.

## 5. Glossary

#### **Acronyms:**

BC Act Biodiversity Conservation Act 2016, Western Australia

BoM Bureau of Meteorology, Australian Government

DAADepartment of Aboriginal Affairs, Western Australia (now DPLH)DAFWADepartment 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.