

Clearing Permit Decision Report

1. Application details

| n Application acta | | | | | | |
|---|---|--|--|--|--|--|
| 1.1. Permit applica | tion details | | | | | |
| Permit application No.: | 8843/1 | | | | | |
| Permit type: | Purpos | Purpose Permit | | | | |
| 40 Duananani -1-4 | | | | | | |
| 1.2. Proponent det | | | | | | |
| Proponent's name: | Black | Black Cat (Bulong) Pty Ltd | | | | |
| 1.3. Property detail | ls | | | | | |
| Property: | | Lease 25/24 | | | | |
| 1 · · | • | Mining Lease 25/91 | | | | |
| | | Mining Lease 25/129 | | | | |
| Local Government Area: | City of | City of Kalgoorlie-Boulder | | | | |
| Colloquial name: | | Bulong Gold Project | | | | |
| - | | , | | | | |
| 1.4. Application | | | | | | |
| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of: | | | |
| 70.55 | Mechanical Removal Mineral production and associated activities | | | | | |
| 1.5. Decision on ap | plication | | | | | |
| Decision on Permit Application: Grant | | | | | | |
| Decision Date: | 7 May 2 | | | | | |
| | | | | | | |
| 2. Site Information | | | | | | |
| | | | | | | |
| 2.1. Existing enviro | onment and in | formation | | | | |
| 2.1.1. Description of the | he native vege | tation under application | | | | |
| , | 5. | | | | | |
| Vegetation Description | • | | y mapped as the following Beard vegetation associations: | | | |
| | | | rina cristata & Eucalyptus sp.; and | | | |
| | 468: Medium wo | oodland; salmon gum & goldfield | as diackdutt (GIS Database). | | | |
| A flora and vegetation survey was conducted over the application area by Botanica Consulting (Bot July 2019. The following six vegetation types were recorded within the application area (Botanica, 2 | | | | | | |
| | CLP-EW1: Low woodland of <i>Eucalyptus salmonophloia</i> over mid shrubland of <i>Eremophila scoparia</i> ar shrubland of <i>Atriplex vesicaria / Olearia muelleri</i> on clay-loam plain. CLP-EW2: Forest of <i>Eucalyptus ravida</i> over mid shrubland of <i>Atriplex nummularia / Eremophila scopa</i> chenopod shrubland of <i>Atriplex vesicaria</i> on clay-loam plain. | | | | | |
| | | | | | | |
| | OD-EW1 : Open low woodland of <i>Eucalyptus salmonophloia</i> over mid shrubland of <i>Eremophila scop</i> samphire shrubland of <i>Tecticornia disarticulata</i> on clay-loam plain. | | | | | |
| | HS-CFW1 : Fore Dodonaea lobula | | d shrubland of Acacia tetragonophylla and low open shrubland of | | | |
| | | S-EW1: Forest of <i>Eucalyptus stricklandii</i> over mid shrubland of <i>Eremophila oldfieldii</i> subsp. angustifolia and low pen shrubland of <i>Ptilotus obovatus</i> on hillslope. | | | | |
| | | | i / Eucalyptus griffithsii over mid shrubland of Acacia us obovatus / Westringia rigida on hillslope. | | | |
| Clearing Description | Bulong Gold Project. Black Cat (Bulong) Pty Ltd proposes to clear up to 70.55 hectares of native vegetation within a boundary of approximately 114 hectares, for the purpose of mineral production and associated activities. The project is located approximately 25 kilometres east of Kalgoorlie-Boulder, within the City of Kalgoorlie-Boulder. | | | | | |
| Vegetation Condition | Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994). | | | | | |
| | То | | | | | |
| | | | | | | |
| | Degraded: Struc (Keighery, 1994 | | eration to good condition requires intensive management | | | |
| | | | Page 1 | | | |

The vegetation condition was derived from a vegetation survey conducted by Botanica (2019).

The proposed clearing is for the purpose of accessing and conducting mining activities.

8. 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 Murchison and Eastern Goldfield subregions of the Interim Biogeographic Regionalisation for Australia (IBRA) Murchison and Coolgardie Bioregions respectively (GIS Database). The Eastern Murchison subregion is characterised by its internal drainage and extensive areas of elevated red desert sandplains with minimal dune development. The vegetation is dominated by Mulga Woodlands often rich in ephemerals; hummock grasslands, saltbush shrublands and Halosarcia shrublands (CALM, 2002). The Eastern Goldfields subregion is characterised by undulating plains interrupted by low hills and ridges, supporting mallees, *Acacia* thickets and shrub-heaths on sandplains, and diverse *Eucalyptus* woodlands around salt lakes, on ranges, and in valleys. Salt lakes support dwarf shrublands of samphire. The subregion is rich in endemic *Acacia* species (CALM, 2002).

The application area falls within 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 70.55 hectares in size, the clearing permit application area represents less than 0.001% of the area covered by the Great Western Woodlands, and the proposed clearing is unlikely to have any significant impact on the conservation values of the Great Western Woodlands.

A desktop flora and vegetation assessment of the application area with a 20 kilometre buffer identified 100 flora taxa (Botanica, 2019). The desktop assessment recorded no Threatened or Priority Flora within the application area (Botanica, 2019). The following four conservation significant flora species were recorded as occurring within a 20 kilometre radius of the application area: *Gastrolobium graniticum* (EN at both state and federal level); *Eremophila praecox* (P1); *Eremophila xantholaema* (P1) and; *Tecticornia flabelliformis* (P1 at state and VU at federal level) (Botanica, 2019). Vegetation types of the application area are unsuitable for *Gastrolobium graniticum* and *Tecticornia flabelliformis* given there are no granite outcrops or saline flats present (Botanica, 2019). *Eremophila praecox* and *Eremophila xantholaema* may possibly occur within the application area, given there is suitable habitat (Botanica, 2019).

A flora and vegetation survey of the application area and surrounds was conducted by Botanica (2019) on 28 July 2019. A total of 25 families, 46 genera and 91 taxa (including eight annual taxa and one introduced taxa) were recorded during the vegetation survey (Botanica, 2019). No Threatened or Priority flora were recorded during the flora and vegetation survey within the application area (Botanica, 2019).

No Threatened or Priority Ecological Communities were identified as potentially occurring in the application area and the field survey of the application did not record any (Botanica, 2019; GIS Database).

A desktop fauna assessment of the application identified a total of 135 vertebrate fauna taxa within a 20 kilometre radius of the survey area, including 77 bird species, 3 amphibians, 19 mammals and 36 reptiles (Botanica, 2019). In addition, 9 introduced taxa were identified as potentially occurring within the application area (Botanica, 2019).

Conservation significant species: Peregrine Falcon, *Falco peregrinus* (OS); Malleefowl, *Leipoa ocellata* (VU at both state and federal level) and; Central Long-eared Bat, *Nyctophilus major tor* (P4), may potentially occur within the application area as suitable habitat is present (Botanica, 2019). The Peregrine Falcon is unlikely to utilise the application area given its large home range and preference for coastal and inland cliffs or open woodlands near water (Botanica, 2019). Some suitable foraging and roosting habitat is present within the application area for the Central Long-eared Bat, however the limited records of this species in the surrounds suggests it is uncommon in the area and unlikely to be impacted by the proposed clearing (Botanica, 2019). Malleefowl are unlikely to utilise the area, with only transient individuals likely to occasionally occur (Botanica, 2019). The vegetation types and fauna habitats within the application area are considered common and widespread throughout the region (Botanica, 2019).

The vegetation associations, fauna habitats and landform types present within the application area, are well represented in surrounding areas (Botanica, 2019; 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 | Botanica (2019) |
|-------------|-----------------|
| | CALM (2002) |
| | DEC (2010) |

- 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

The following three fauna habitats have been recorded within the application area based on vegetation and associated landforms identified during the field assessment (Botanica, 2019):

Clay Loam Plain: Eucalypt Woodlands;

Open Depression: Eucalypt Woodlands and; **Hillslope**: Casuarina Forest/Eucalypt Woodlands/Mallee Woodlands.

A desktop assessment of the application area and surrounds with a 20 kilometre buffer identified a total of 135 vertebrate fauna, including 77 bird species, three amphibians, 19 mammals and 36 reptiles (Botanica, 2019).

A literature review of conservation significant fauna having been previously recorded in the general area was conducted by Botanica (2019) and identified nine conservation significant fauna species. Three of the nine conservation significant fauna were identified as possibly occurring within the application area (Botanica, 2019). These species were: Peregrine Falcon, *Falco peregrinus* (OS); Malleefowl, *Leipoa ocellata* (VU at both state and federal level) and; Central Long-eared Bat, *Nyctophilus major tor* (P4) (Botanica, 2019).

No conservation significant fauna were recorded during the field assessment of the application area and surrounds (Botanica, 2019). Peregrine Falcons may potentially utilise some sections of the application area and surrounds as a much larger home range, however due to their highly mobile nature they are unlikely to be impacted by the proposed clearing (Botanica, 2019). No potential nest sites were observed during the field assessment (Botanica, 2019).

No suitable nesting habitat for Malleefowl was observed within the application area or surrounds (Botanica, 2019). No evidence of Malleefowl presence was observed during the field assessment, such as individuals, nest mounds or footprints (Botanica, 2019). The habitat types identified within the application area and surrounds suggests that breeding populations are unlikely to utilise the area, however transient, non-breeding individuals may occasionally occur (Botanica, 2019).

The application area and surrounds contains some suitable habitat for foraging and roosting for the Central Long-eared Bat (Botanica, 2019). Records of this species are limited in the general vicinity suggesting it is uncommon and unlikely to be impacted by the proposed clearing (Botanica, 2019).

No unique fauna habitats (i.e. caves, rock outcrops, overhangs or crevices) were identified during the fauna habitat assessment (Botanica, 2019). The fauna habitats of the application area are common and widespread throughout the region (GIS Database).

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

Methodology Botanica (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). A flora survey of the application area did not record any species of Threatened flora (Botanica, 2019).

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

Methodology Botanica (2019)

- 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 (Botanica, 2019).

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

Methodology Botanica (2019)

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 Murchison and Coolgardie Bioregions of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 99% of the pre-European vegetation still exists in the IBRA Murchison Bioregion and approximately 97% in the IBRA Coolgardie Bioregion (Government of Western Australia, 2019). The application area is broadly mapped as Beard vegetation associations 20: Low woodland; mulga mixed with *Allocasuarina cristata* & *Eucalyptus* sp. and 468: Medium woodland; salmon gum & goldfields blackbutt (GIS Database). Approximately 98-99% of the pre-European extent of each of these vegetation associations remains uncleared at both the state and bioregional levels (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 – Murchison | 28,120,586 | 28,044,823 | ~99 | Least Concern | 7.78 |
| IBRA Bioregion – Coolgardie 12,912,204 | | 12,648,491 | ~97 | Least Concern | 16.39 |
| Beard vegetation associations – WA | | | | | |
| 20 | 1,295,103 | 1,292,474 | ~99 | Least Concern | 19.38 |
| 468 | 468 592,022 | | ~98 | Least Concern | 22.86 |
| Beard vegetation associations – Murchison Bioregion | | | | | |
| 20 | 1,174,259 | 1,171,630 | ~99 | Least Concern | 15.49 |
| 468 8,632 | | 8,509 | ~98 | Least Concern | 51.88 |
| Beard vegetation associations – Coolgardie Bioregion | | | | | |
| 468 583,357 | | 575,360 | ~98 | Least Concern | 22.43 |

* 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 (Botanica, 2019; GIS Database). Four minor drainage lines pass through the application area (GIS Database). Drainage lines in the region are dry for most of the year, only flowing briefly immediately following significant rainfall.

The application area contains one vegetation type that is growing in association with a broad floodplain: OD-EW1 – Open low woodland of *Eucalyptus salmonophloia* over mid shrubland of *Eremophila scoparia* and low samphire shrubland of *Tecticornia disarticulata* on clay-loam plain (Botanica, 2019).

Based on the above, the proposed clearing is at variance to this Principle. Potential impacts to vegetation growing in association with the watercourse may be minimised by the implementation of a watercourse management condition.

Methodology Botanica (2019)

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 may be at variance to this Principle

The application area occurs in the Kambalda Zone located within the Kalgoorlie Province. This zone is characterised by flat to undulating plains (with hills, ranges and some salt lakes and stony plains) on greenstone and granitic rocks of the Yilgarn Craton (Botanica, 2019).

The soil type within the application area is described as calcareous loamy earths and red loamy earths with salt lakes soils and some red-brown hardpan shallow loams and red sandy duplexes (Botanica, 2019; GIS Database). There may be a potential for erosion to occur given the size of the proposed clearing (70.55 hectares) and presence of drainage lines.

Based on the above, the proposed clearing may be at variance to this Principle. Potential impacts from erosion as a result of the proposed clearing may be minimised by the implementation of a staged clearing condition.

Methodology Botanica (2019)

GIS Database: - 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 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 Kurrawang Nature Reserve which is located approximately 39 kilometres west-southwest of the application area (GIS Database). The proposed clearing is unlikely to impact on the environmental values of any conservation area.

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

Methodology GIS Database: - DPaW Tenure

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

Comments Proposal is not likely to be at variance to this Principle There are no 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). Four minor drainage lines intersect the application area (GIS Database). Drainage 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 - Public Drinking Water Source Areas |
| | vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the ce or intensity of flooding. |
| Comments | Proposal is not likely to be at variance to this Principle The climate of the region is semi-arid to arid, with an average rainfall of approximately 200-300 millimetres per year (CALM, 2002). The nearest weather station is Bulong, approximately 2.5 kilometres west of the application area, with an average rainfall of approximately 257.3 millimetres per year (BoM, 2020). |
| | There are no permanent water courses or waterbodies within the application area (GIS Database). Four minor drainage lines intersect the application area (GIS Database). Seasonal drainage lines are common in the region and temporary localised flooding may occur briefly following heavy rainfall events. The proposed clearing is unlikely to increase the incidence or intensity of natural flooding events (Botanica, 2019). |
| | Based on the above, the proposed clearing is not likely to be at variance to this Principle. |
| Methodology | BoM (2020) Botanica (2019) CALM (2002) |
| | GIS Database: - Hydrographic Catchments - Catchments - Hydrography, linear |
| Planning Ins | strument, Native Title, previous EPA decision or other matter. |
| Comments | The clearing permit application was advertised on 13 April 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 (WC2017/007, WC2017/001) over the area under application (DPLH, 2020). These claims have been registered with the National Native Title Tribunal / determined by the Federal Court on behalf of the claimant groups. However, the mining tenure has been granted in accordance with the future act regime of the <i>Native Title Act 1993</i> 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 <i>Native Title Act 1993</i> . |
| | There are no registered Aboriginal Sites of Significance within the application area (DPLH, 2020). It is the proponent's responsibility to comply with the <i>Aboriginal Heritage Act</i> 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. Referen | Ces |
| BoM (2020) B <u>http</u> Botanica (201 (Bu | ureau of Meteorology Website – Climate Data Online, Weather Station Name. Bureau of Meteorology. <u>b://www.bom.gov.au/climate/data/</u> (Accessed 15 April 2020). 9) Reconnaissance Flora/Vegetation & Fauna Survey. Bulong Gold Project. Report prepared for Black Cat long) Pty Ltd, by Botanica Consulting, August 2019. A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation |

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. Department of Environment and Conservation, Western Australia.

DPLH (2020) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <u>http://maps.daa.wa.gov.au/AHIS/</u> (Accessed 15 April 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.

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.

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 the Environment and Energy, Australian Government |
| DMIRS | Department of Environment Regulation, Western Australia (now DWER) |
| DMP | Department of Mines, Industry Regulation and Safety, Western Australia |
| DPIRD | Department of Mines and Petroleum, Western Australia (now DMIRS) |
| DPLH | 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 the Environment, Australian Government (now DDEE) |
| DPAW | Department of Parks and Wildlife, Western Australia (now DBCA) |
| DSEWPaC | Department of Parks and Wildlife, Western Australia (now DBCA) |
| DWER | Department of Water and Environmental Regulation, Western Australia |
| EPA | Environmental Protection Authority, Western Australia |
| EPA | Environmental Protection Act 1986, Western Australia |
| EPACt | 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 |
| 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 <u>Threatened species:</u>

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 <u>Priority species:</u>

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.