Government of Western Australia
Department of Mines, Industry Regulation and Safety

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.:	8413/1
Permit type:	Purpose Permit

1.2. Proponent details

Proponent's name:	**Hancock Prospecting Pty Ltd**

1.3. Property details

Property:	Exploration Licence 47/2117
Local Government Area:	Shire of Ashburton
Colloquial name:	Malay Well

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1		Mechanical Removal	Groundwater Investigations

1.5. Decision on application

Decision on Permit Application:	Grant
Decision Date:	20 June 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 areas is broadly mapped as the following Beard vegetation association:
175: Short bunch grassland - savanna/grass plain (Pilbara) (GIS Database).

A flora and vegetation survey was conducted over the application areas by Maia Environmental Consultancy Pty Ltd (Maia) during October and November, 2018. The following vegetation associations were recorded within the application areas (Maia, 2018):
Sparse tussock grassland of *Eriachne benthamii* and *Chrysopogon fallax* with isolated low trees of *Eucalyptus victrix*; and
A mid shrubland of *Acacia synchronicia* and *Acacia tetragonophylla* with a tall sparse shrubland of *Acacia xiphophylla* and *Acacia aptaneura* and isolated tussock grasses of **Cenchrus setiger* and *Enneapogon polyphyllus*.
* denotes weed species.

Clearing Description

Malay Well.
Hancock Prospecting Pty Ltd proposes to clear up to one hectare of native vegetation within a boundary of approximately 7.28 hectares, for the purpose of groundwater investigations. The project is located approximately 200 kilometres south of Port Hedland and approximately 180 kilometres north-west of Newman, within the Shire of Ashburton.

Vegetation Condition

Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).

Comment

The vegetation condition was derived from a vegetation survey conducted by Maia (2018).

The proposed clearing is for exploration drilling for groundwater investigations at two locations approximately 15 kilometres apart.

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 may be at variance to this Principle

The clearing permit application areas are located within the Fortescue Plains subregion of the Interim Biogeographic Regionalisation for Australia (IBRA) Pilbara Bioregion (GIS Database). The Fortescue Plains subregion is characterised by alluvial plains and river frontage (CALM, 2002). Extensive salt marsh, mulga-bunch grass, and short grass communities exist on alluvial plains in the east and deeply incised gorge systems exist in the west (CALM, 2002). An extensive calcrete aquifer feeds numerous permanent springs in the

central Fortescue, supporting large permanent wetlands with extensive stands of river gum and cadjeput *Melaleuca* woodlands (CALM, 2002).

Two vegetation communities were recorded in the application areas, with one vegetation community recorded at each of the polygons (Maia, 2018). All vegetation was considered to be in good condition (Maia, 2018). The application areas lie within the Fortescue Valley wetlands, and in close proximity to the Freshwater Claypans of the Fortescue Valley Priority 1 Ecological Community (Freshwater Claypans PEC). The Freshwater Claypans PEC is recognised as conservation significant due to the rich aquatic flora and invertebrate fauna of the claypans (DBCA, 2019a). There are two occurrences of the Freshwater Claypans PEC on Mulga Downs Station that are located within approximately four kilometres of the application areas and include Koodjeepindarranna Pool, described as a large treed claypan, and Gnoona Pool South, described as a large partially wooded claypan (DBCA, 2019a). Threats to these sites include non-native grazers, weeds, and altered hydrology that includes reduction of the frequency of low to moderate flow flood events downstream as this affects survival of riparian trees and reduces frequency or duration of flooding of the claypan floodplains (DBCA, 2019a). The two vegetation types described within the application areas were considered unlikely to align with the Freshwater Claypans PEC (DBCA, 2019a). Vegetation in the western polygon was considered to have some similarity to the Freshwater Claypans PEC, but did not occur within a clay pan, rather an area where water pools occur in small isolated patches (DBCA, 2019a). Therefore, none of the vegetation communities recorded represented a PEC. No Threatened Ecological Communities (TECs) were identified as potentially occurring in the application areas and none were recorded during the field assessment (Maia, 2018).

A total of 76 flora species were recorded during the field assessment of the application areas; within the western polygon 35 flora species from 31 genera and 16 families were recorded, and within the eastern polygon 54 flora species from 35 genera and 18 families were recorded (Maia, 2018). No Threatened flora were determined to be potentially occurring within the application areas, and none were recorded during the field assessment (Maia, 2018). Eight Priority flora species were identified as potentially occurring within the application areas; *Calotis squamigera* (P1), *Euphorbia australis* var. *glabra* (P2), *Teucrium pilbaranum* (P2), *Rhagodia* sp. Hamersley (M. Trudgen 17794) (P3), *Rostellularia adscendens* var. *latifolia* (P3), *Themeda* sp. Hamersley Station (M.E. Trudgen 11431) (P3), *Bulbostylis burbidgeae* (P4) and *Goodenia nuda* (P4) (Maia, 2018). One Priority flora species, *Eragrostis crateriformis* (P3), was recorded within the application areas with two individual plants recorded at one location (Maia, 2018). It is worth noting that as the flora survey was conducted outside of the recommended survey timing for botanical surveys in the Eremaean botanical province and due to a lack of significant rainfall events prior to the survey, it is possible that annual herb species such as *Goodenia* sp. East Pilbara (A.A. Mitchell PRP 727) (P3) and *Rostellularia adscendens* var. *latifolia* (P3) may occur in the area (DBCA 2019b). However, given the small amount of clearing, the proposed impacts to the status of the conservation of these species would not be significant at a local or regional level.

Four weed species were recorded during the field assessment of the application areas, with the western polygon recording *Malvastrum americanum* and *Vachellia farnesiana*, and the eastern polygon recording *Bidens bipinnata* and *Cenchrus setiger* (Maia, 2018). Weeds have the potential to out-compete native flora and reduce the biodiversity of an area. Potential impacts to biodiversity as a result of the introduction of weeds may be minimised by the implementation of a weed management condition.

Advice sought from DBCA (2019c) indicated that a number of conservation significant fauna, including the northern quoll (*Dasyurus hallucatus*, EN), bilby (*Macrotis lagotis*, VU), migratory and other specially protected birds (gull-billed tern, *Gelocheidon nilotica*, MI; glossy ibis, *Plegadis falcinellus*, MI; and peregrine falcon, *Falco peregrinus*, OS), have been recorded within ten kilometres of the application. Additionally, increasing the desktop search radius to 20 kilometres added a further three threatened fauna species recorded in the surrounding area, including the Pilbara olive python (*Liasis olivaceus barroni*, VU), Pilbara leaf-nosed bat (*Rhinonicteris aurantia*, VU) and ghost bat (*Macroderma gigas*, VU) (DBCA, 2019c). The application areas are within the 'high priority survey area' for night parrots and there is a 2005 sighting approximately 70 kilometres to the east of the application areas (DBCA, 2019c). However, there is unlikely to be any significant impacts to these fauna species from the proposed vegetation clearing as the habitat does not appear suitable for any of the threatened fauna species, based on the vegetation description and site photographs provided in the flora survey report or due to the transitory nature of species visiting the area (DBCA, 2019b; 2019c; Maia, 2018). The use of the area by fauna will likely be different when it is wet, inundated / flooded, due to increase vegetation cover and foraging resources (DBCA, 2019c). It is unlikely that the proposed clearing will impact any conservation significant fauna species, if it occurs when the site is dry. Potential impacts to fauna as a result of clearing may be minimised by the implementation of a wetland management condition.

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

Methodology

CALM (2002)
DBCA (2019a)
DBCA (2019b)
DBCA (2019c)
Maia (2018)

GIS Database:
- IBRA Australia
- Pre-European Vegetation

- Threatened and Priority Flora
- 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 indigenous to Western Australia.

Comments

Proposal may be at variance to this Principle

The Fortescue Marsh area is known to be an important migratory and wetland bird breeding location (DBCA, 2019c). However, the importance of the location as fauna habitat is highest when it is wet, inundated / flooded, as this is when the birds are present in the area and are breeding and raising young (DBCA, 2019c). If the proposed clearing occurs when the site is dry, avoids trees and limits removal of other vegetation, then it is unlikely that there will be any impact to the bird breeding habitat or other fauna habitat (DBCA, 2019c). Potential impacts to fauna habitat as a result of clearing may be minimised by the implementation of a wetland management condition.

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

Methodology DBCA (2019c)

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 areas (GIS Database). Flora surveys of the application areas did not record any species of Threatened flora (Maia, 2018).

The vegetation associations within the application areas are common and widespread within the region (Maia, 2018; 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 Maia (2018)

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 areas (GIS Database).

A flora and vegetation survey of the application areas did not identify any TECs (Maia, 2018).

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

Methodology Maia (2018)

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

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

Comments

Proposal is not at variance to this Principle

The application areas fall 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 areas are broadly mapped as Beard vegetation association 175: Short bunch grassland - savanna/grass plain (Pilbara) (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 areas do 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 – Pilbara	17,808,657	17,733,583	~99	Least Concern	10
Beard vegetation associations – WA					
175	526,957	524,640	~99	Least Concern	7
Beard vegetation associations – Pilbara Bioregion					
175	507,860	507,466	~99	Least Concern	7

* 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

The application areas exist wholly within the Fortescue Marsh Environmentally Sensitive Area (GIS Database), currently listed in the Inventory of Important Wetlands and proposed Ramsar wetland (DBCA 2019b). Both clearing polygons contained *Eucalyptus victrix*, a species that commonly grows in association with watercourses (Maia, 2018). However, as the vegetation within the application areas appears to be relatively sparse, it is unlikely that clearing a total of one hectare will have a significant impact on the values of the wetland, which covers an area of approximately 100,000 hectares (Environment Australia, 2001).

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

Methodology

DBCA (2019b)
Environment Australia (2001)
Maia (2018)

GIS Database:
- Environmentally Sensitive Areas
- 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 areas lie within the Coolibah land system (GIS Database). This land system has been mapped and described in a technical bulletin produced by the former Department of Agriculture (now the Department of Primary Industries and Regional Development).

The Coolibah land system is described as floodplains with weakly gilgaied clay soils supporting coolabah woodlands with tussock grass understorey. Floodplains of this land system generally have low susceptibility to erosion, however alluvial plains are highly susceptible to erosion (Van Vreeswyk et al., 2004).

The proposed clearing of up to one hectare of native vegetation within a boundary of approximately 7.28 hectares, for the purpose of groundwater investigations 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:
- Landsystem Rangelands

(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 areas. The nearest DBCA (formerly DPaW) managed land is the Karijini National Park which is located approximately 14 kilometres south of the application areas (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 areas (GIS Database). The application areas exist entirely within the Fortescue Marsh wetland (GIS Database). The proposed clearing is unlikely to result in significant changes to surface water flows due to the small area of clearing in a relatively bare area (GIS Database; Maia, 2018).

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

Maia (2018)

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 desert tropical, with rainfall falling mainly in summer cyclonic events (CALM, 2002). The nearest weather station is Wittenoom, approximately 13 km south-west of the application areas, with an average rainfall of approximately 461.8 millimetres per year (BoM, 2019).

The application areas exist entirely within the Fortescue Marsh wetland (GIS Database). However, the proposed clearing is unlikely to increase the incidence or intensity of natural flooding events due to the small area of disturbance.

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

Methodology BoM (2019)
CALM (2002)

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 13 May 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 is one native title claim (WC2011/006) over the area under application (DPLH, 2019). This claim has been determined by the Federal Court 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 areas (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, Wittenoom. Bureau of Meteorology. http://www.bom.gov.au/climate/data/ (Accessed 4 June 2019).

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

DBCA (2019a) Advice received in relation to Clearing Permit Application CPS 8413/1 - vegetation. Species and Communities Branch, Department of Biodiversity, Conservation and Attractions, Western Australia, May 2019.

DBCA (2019b) Advice received in relation to Clearing Permit Application CPS 8413/1 - regional. Species and Communities Branch, Department of Biodiversity, Conservation and Attractions, Western Australia, May 2019.

DBCA (2019c) Advice received in relation to Clearing Permit Application CPS 8413/1 - fauna. Species and Communities Branch, Department of Biodiversity, Conservation and Attractions, Western Australia, May 2019.

DPLH (2019) Aboriginal Heritage Enquiry System. Department of Planning, Lands and Heritage. http://maps.daa.wa.gov.au/AHIS/ (Accessed 13 June 2019).

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.

Environment Australia (2001) A Directory of Important Wetlands in Australia, Third Edition. Environment Australia, Canberra.

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.

Maia (2018) JBS&G: Mulga East Iron Ore Project – Proposed Monitoring Bores MDCMB03 and MDCMB11 – Targeted Flora Survey. Report prepared for Hancock Prospecting Pty Ltd, by Maia Environmental Consultancy Pty Ltd, December 2018.

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:

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)
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 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.