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.:	8991/2
Permit type:	Purpose Permit

1.2. Proponent details

Proponent's name:	**Element 25 Limited**

1.3. Property details

Property:	Mining Lease 52/1074 Miscellaneous Licences 52/215, 52/218, 52/220, 52/221
Local Government Area:	Shire of Meekatharra
Colloquial name:	Butcherbird Manganese Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
265		Mechanical removal	Mineral production and associated activities

1.5. Decision on application

Decision on Permit Application:	Grant
Decision Date:	16 February 2021

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description

Beard vegetation associations have been mapped for the whole of Western Australia. One Beard vegetation association has been mapped within the application area:

29: Sparse low woodland; mulga, discontinuous in scattered groups (GIS Database).

Several flora, vegetation and habitat field assessments have been completed over a majority of the amendment application area since 2010, as part of mapping of Mining Lease ML 52/1074 and adjacent project areas. The most recent surveys were undertaken by Ecoscape (2019b) in April 2019 for the original permit application area. Ecoscape were also commissioned in 2020 to undertake an environmental desktop assessment of the amendment application area, drawing on data from previous regional surveys and a review of recent field photographs of the area (Ecoscape, 2020; MBS Environmental, 2020b).

These assessments report a number of vegetation associations located within the clearing permit application area, most of which are dominated by Acacia species in the Mulga complex (Ecoscape, 2019b; Ecoscape, 2020; MBS Environmental, 2020a):

Clay Flat

- EiPsPoLSS: *Eremophila incisa, Ptilotus schwartzii* and *Ptilotus obovatus* low sparse to scattered shrubs/forbs.
- ErEfrSaMSS: *Eremophila rigida, Eremophila fraseri* subsp. *fraseri* and *Senna artemisioides* subsp. *helmsii* mid sparse shrubland over *Eremophila incisa* low scattered shrubs.
- ScLSCS: *Sclerolaena cuneata* low sparse chenopod shrubland with *Hakea preissii* and *Eremophila lachnocalyx* mid scattered shrubs.

Flat

- AapAptApaLOW: *Acacia aptaneura*, *Acacia pteraneura* and *Acacia paraneura* low open woodland over *Eremophila tietkensii* and *Acacia sclerosperma* subsp. *sclerosperma* mid sparse shrubland over *Senna* sp. Meekatharra (E. Bailey 1-26) and *Ptilotus obovatus* sparse shrubland.
- ApaLOW: *Acacia paraneura* low open woodland over *Eremophila galeata* and *Senna glutinosa* subsp. x *luerssenii* mid scattered shrubs over *Senna artemisioides* subsp. *helmsii*, *Solanum lasiophyllum* and *Sida platycalyx* low scattered shrubs.
- EcuHpSgMOS: *Eremophila cuneifolia*, *Hakea preissii* and *Senna glutinosa* subsp. *x luerssenii* mid open to sparse shrubland over *Senna* sp. Meekatharra (E. Bailey 1-26), *Sclerolaena cuneata* and *Frankenia setosa* low sparse shrubland/chenopod shrubland.

Flat / gentle slopes

- AapAcaAanLOF (Grove): *Acacia aptaneura, A. ?catenulata* and *A. aneura* low open forest over *Eremophila forrestii* subsp. *forrestii, E. glutinosa* and *Sida ectogama* mid sparse shrubland over *Cheilanthes sieberi* subsp. *sieberi* and *Triodia basedowii* low sparse ferns/hummock Grasses.

  or

  AapAayGbLOW (Intergrove): *Acacia aptaneura, A. ayersiana* and *Grevillea berryana* low open woodland/scattered trees over *Eremophila forrestii* subsp. *forrestii, E. glutinosa* and *Senna glaucifolia* low scattered shrubs over *Eragrostis eriopoda* and *Ptilotus schwartzii* low scattered tussock grasses/shrubs.

- AapAiAprLOW: *Acacia aptaneura*, *A. incurvaneura* and *A. pruinocarpa* low open woodland over *Senna glutinosa* subsp. x *luerssenii*, *Eremophila citrina* and *E. glutinosa* mid sparse shrubland over *Triodia basedowii*, *Ptilotus schwartzii* and *P. obovatus* low scattered hummock grassland/forbland/shrubland.

Flats / Low rises

- AprAsuGbLOW: *Acacia pruinocarpa, Acacia ?subcontorta* and *Grevillea berryana* low scattered to open woodland over *Eremophila citrina, E. latrobei* and *Acacia kempeana* mid sparse shrubland over *Triodia basedowii* low hummock grassland.

Crests and gentle slopes

- AiAapGbLOW: *Acacia incurvaneura*, *A. aptaneura* and *Grevillea berryana* low open woodland over *Eremophila citrina*, *E. appressa* and *E. glutinosa* mid sparse shrubland over *Triodia basedowii* low open hummock grassland.

Minor creek

- AptLW: *Acacia pteraneura* low woodland over *Acacia tetragonophylla*, *Eremophila galeata* and *Sida ectogama* mid sparse shrubland over *Solanum lasiophyllum* and *Ptilotus obovatus* low isolated shrubs.

Clearing Description

Butcherbird Manganese Project.
Element 25 Limited proposes to clear up to 265 hectares of native vegetation within a boundary of approximately 1,145 hectares, for the purpose of mineral production and associated activities. The project is located approximately 115 kilometres south of Newman, within the Shire of Meekatharra.

Vegetation Condition

Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).

To

Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994).

Comment

The vegetation condition within the majority of the approved Purpose Permit Area was derived from biological surveys conducted over the mining lease area by Ecoscape (2019b) and a review of recent field photographs of the amended application area (Ecoscape, 2020). The majority of the survey area was considered to be in “good” condition. Parts of the amendment application area are degraded as a result of existing pastoral and water exploration tracks (MBS Environmental, 2020b).

Clearing permit CPS 8991/1 was granted by the Department of Mines, Industry Regulation and Safety on 10 September 2020 and was valid from 3 October 2020 to 2 October 2025. The permit authorised the clearing of up to 250 hectares of native vegetation within a permit boundary of approximately 994.6 hectares, for the purposes of mineral production and associated activities.

The Permit Holder has applied to amend CPS 8991/1 to increase the amount of clearing to 265 hectares, the permit boundary to approximately 1145 hectares and include additional tenure, to establish borefield infrastructure (‘Eastern Borefield’) required for the Butcherbird Manganese Project.

3. Assessment of application against Clearing Principles

Comments

Element 25 Limited have applied to increase the permit boundary by approximately 150 hectares and the approved amount of clearing by 15 hectares. The changes proposed for the permit area are to establish the Eastern Borefield infrastructure corridor (water bores, an access track and water conveyance infrastructure), within Miscellaneous Licences L 52/215, L 52/218 and L 52/220. Pre-disturbed access tracks will mainly be used and the clearing footprint will be kept to approximately 10 meters in width, to minimise clearing required (MBS Environmental, 2020b).

The clearing amendment application area is located in the Augustus subregion of the Gascoyne Interim Biogeographical Regionalisation of Australia (IBRA) bioregion (GIS Database). The region is characterised by rugged low Proterozoic sedimentary and granite ranges divided by broad flat valleys. Mulga woodland with *Triodia* occurs on shallow stony loams on rises, while the shallow earthy loams over hardpan on the plains are covered by open Mulga woodland. The area is characterised by a desert climate with bimodal rainfall (CALM, 2002).

The vegetation within the amendment area is broadly mapped as Beard vegetation association 29, which is consistent with the original permit area (GIS Database). Approximately 99% of the pre-European vegetation

association 29 remains uncleared at both state bioregional level (Government of Western Australia, 2019; GIS Database). Hence the vegetation proposed to be cleared does not represent a significant remnant of native vegetation in an area that has been extensively cleared.

In April 2019, Ecoscape (2019a; 2019b) completed flora, vegetation and fauna field surveys covering a significant portion of the amendment application area. Ecoscape were also commissioned to undertake an environmental desktop assessment of the amendment application area in 2020, drawing on data from previous regional surveys and a review of recent field photographs of the area (Ecoscape, 2020; MBS Environmental, 2020b).

The vegetation associations, fauna habitats and landform types present within the amendment application area, are well represented at a local and regional scale (Ecoscape, 2020, Ecoscape, 2019a; Ecoscape, 2019b; MBS Environmental, 2020a; GIS Database). The relatively small amount (up to 15 hectares) of narrow clearing footprint (approximately 10 meters wide) required for the establishment bores, access tracks, power and pipelines associated within the amendment application area is not likely to significantly impact an area of higher biodiversity than the original permit area or surrounding areas.

Field study results and desktop reviews of habitat preferences, established that the following Priority Flora species have a high to moderate likelihood of occurring within the amendment application area: *Eremophila rigida* (P3), *Rhagodia sp. Hamersley* (M. Trudgen 17794) (P3), *Maireana prosthecochaeta* (P3), *Goodenia nuda* (P4) and *Ptilotus trichocephalus* (P4)(DBCA, 2021b; Ecoscape, 2020; Ecoscape, 2019a; MBS Environmental, 2020a). Based on the distribution of known local and regional populations of these species, the nature of the proposed clearing with the amendment application area is not likely to significantly impact the conservation status of any of these species at either a local or regional scale (Ecoscape, 2020; MBS Environmental, 2020a; Western Australian Herbarium,1998-)

As part of this assessment, a review of the occurrence of the locally restricted Priority Flora taxa *Eremophila appressa* (P1) was also conducted. The species was not observed within the amendment application area and is deemed unlikely to occur based on its habitat preference. However a known population of the taxa occurs within the current CPS 8991/1 permit area, which could be significantly impacted by future clearing activities within the permit boundary (DBCA, 2021a; Ecoscape, 2019b). Hence, it is recommended that a flora management condition with associated exclusion zones be added to the permit, to minimise the risk of this species being significantly impacted by future clearing activities.

The vegetation proposed to be cleared is unlikely to represent significant habitat for native fauna, in a regional context (Ecoscape, 2019b). The Brush-tailed Mulgara (*Dasycerus blythi*, Priority 4) is the only fauna species of conservation significance deemed to have a high likelihood of being found in the amended application area and the species was recorded locally from previous surveys (Ecoscape, 2019a; MBS Environmental, 2020a). However, the relatively small amount (up to 15 hectares) of narrow clearing footprint (approximately 10 meters wide) required to establish bores, access tracks, power and pipelines associated with the amendment application area is unlikely to have an impact on the population or conservation status of this species as a whole, as it has a much broader distribution range (DBCA, 2021a; Ecoscape, 2019a; Ecoscape, 2020). Furthermore, all habitat types of the application area are represented over wide areas and include no niche habitat types that would support Short Range Endemic (SRE) invertebrate species, including the ephemeral creek that is largely dry and devoid of mesic locations (Ecoscape, 2020).

A number of weed species were identified during previous surveys of the original clearing permit area and mining lease (Ecoscape, 2019b; MBS Environmental, 2020a). Weeds the have the potential to out-compete native vegetation and reduce biodiversity. Continued implementation of the existing weed management condition may minimise the risk of spread of weeds into the amendment application area.

No Threatened flora, Threatened Ecological Communities or Priority Ecological Communities have been recorded within the amendment area (GIS Database), and none were found as part of the flora and vegetation studies (Ecoscape, 2020; Ecoscape, 2019a).

The application area is not located within any conservation areas. The nearest DBCA (formerly DPaW) managed land is the Collier Range National Park, which is located approximately eight kilometres to the southwest of the application area (GIS Database). The clearing is unlikely to impact on the environmental values of any conservation areas.

The amendment application area is located on a broad floodplain/clay flat associated with the ephemeral Ilgarari Creek and associated drainage lines, which it crosses at a number of locations (Ecoscape, 2020; MBS Environmental, 2020a). These watercourses are dry for most of the year, only flowing briefly immediately following significant rainfall (MBS Environmental, 2020; Water Technology, 2012). No sheet flow dependant Mulga was observed within the amendment application area (Ecoscape 2020; MBS Environmental, 2020a).

Photographic evidence shows that sparse *Eucalyptus victrix* assemblages are found within this application area along the edges of the creek lines, suggesting it has a riparian nature (Ecoscape, 2020). However the species is considered to be common locally and regionally in association with waterways (Ecoscape, 2020). While the riparian band occurring within the amendment application area is relatively dense compared to that of the nearby surroundings, the vegetation is still considered to be sparse, and the clearing required to cross the creek lines is minor (~10m wide) and will be able to utilise pre-disturbed and areas of lower vegetation density

(MBS Environmental, 2020b). Potential impacts to vegetation growing in association with the watercourses may be minimised by the implementation of a watercourse management condition.

The amendment application area lies almost solely within the Nooningnin Land System (GIS Database), which has been described by Payne et al. (1988) as hardpan plains with large groves supporting mulga shrubland. This land system is subject to sheet flow and may be susceptible to erosion if vegetation is removed (Payne et al., 1988). However the relatively small amount (up to 15 hectares) of narrow clearing footprint (approximately 10 meters wide) proposed within the amendment application area is not likely to result in any appreciable land degradation (MBS Environmental, 2020b). There may be some risk of localised land degradation at creek crossings, which can be minimised by continued implementation of a staged clearing condition and implementation of a watercourse management condition.

The restricted nature and relatively small amount (up to 15 hectares) of proposed additional clearing areas for a narrow infrastructure corridor (approximately 10 meters) is unlikely to result in any significant impact to surface or groundwater quality (MBS Environmental, 2020a; Water Technology, 2012).

The removal of riparian vegetation (e.g. *Eucalyptus victrix*) may reduce the volume of water being actively taken up by vegetation from surface water bodies and groundwater storage, thereby increasing the risk of pooling in water bodies (MBS Environmental, 2020a; Water Technology, 2012). However, due to the limited extent of riparian vegetation to be removed within the amendment application area, it is considered unlikely that flooding will either be exacerbated or increase in frequency (MBS Environmental, 2020a; Water Technology, 2012).

The amendment application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.51O of the *Environmental Protection Act 1986*, and the proposed clearing is at variance to Principle (f), may be at variance to Principle (g), is not likely to be at variance to Principles (a), (b), (i) and (j) and is not at variance to Principle (c), (d), (e) and (h).

Methodology

CALM (2002)
DAWE (2021)
DBCA (2021a)
DBCA (2021b)
DPLH (2021)
Ecoscape (2019a)
Ecoscape (2019b)
Ecoscape (2020)
Government of Western Australia (2019)
Keighery, B.J. (1994)
MBS Environmental (2020a)
MBS Environmental (2020b)
Payne, A L, Mitchell, A A and Holman, W F. (1988)
Water Technology (2012)
Western Australian Herbarium (1998-)

GIS Database:
- IBRA Australia
- Pre-European Vegetation
- Threatened and Priority Flora
- Threatened Ecological Sites Buffered
- Threatened Fauna

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

Comments

The clearing permit application was advertised on 24 December 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 is one native title claim (WC2005/006) over the area under application (DPLH, 2021). 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 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

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

DAWE (2021) EPBC Act Protected Matters Search Tool. Department of Agriculture, Water and the Environment. https://www.environment.gov.au/epbc/protected-matters-search-tool (Accessed 10 February 2021).

DBCA (2021a) Advice received in relation to Clearing Permit Application CPS 8991/2. Species and Communities Branch, Department of Biodiversity, Conservation and Attractions, Western Australia, February 2021.

DBCA (2021b) NatureMap: Mapping Western Australia's Biodiversity, Department of Biodiversity, Conservation and Attractions. https://naturemap.dbca.wa.gov.au/ (Accessed 10 February 2021).

DPLH (2021) Aboriginal Heritage Inquiry System - Department of Planning, Lands and Heritage. https://espatial.dplh.wa.gov.au/AHIS/ (Accessed 10 February 2021).

Ecoscape (2019a) Butcherbird Manganese Project Fauna Assessment. Report prepared for Element 25 Limited by Ecoscape Australia Pty Ltd, August 2020.

Ecoscape (2019b) Butcherbird Manganese Project Flora Assessment. Report prepared for Element 25 Limited by Ecoscape Australia Pty Ltd, August 2020.

Ecoscape (2020) Butcherbird Manganese Project: Eastern Borefield Biological Risk Assessment. Report prepared for Element 25 Limited by Ecoscape Australia Pty Ltd, November 2020.

Government of Western Australia (2019) 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions, Perth. https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

MBS Environmental (2020a) Native Vegetation Clearing Permit Butcherbird Manganese Project Stage 1. Report prepared for Element 25 Limited, by Martinik Bosch Sell Pty Ltd, July 2020.

MBS Environmental (2020b) CPS 8991_1 NVCP Amendment Cover Letter Final. Report prepared for Element 25 Limited, by Martinik Bosch Sell Pty Ltd, July 2020.

Payne, A L, Mitchell, A A and Holman, W F. (1988), An inventory and condition survey of rangelands in the Ashburton River catchment, Western Australia. Technical Bulletin 62. Department of Agriculture and Food, Perth, Western Australia.

Water Technology (2012) Yanneri Hydrological Study. Report prepared for Montezuma Mining Company, by Water Technology Pty Ltd, October 2012.

Western Australian Herbarium (1998-) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions. https://florabase.dpaw.wa.gov.au/ (Accessed 09/02/2021).

5. Glossary

Acronyms:

BC Act	*Biodiversity Conservation Act 2016,* Western Australia
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)
DAWE	Department of Agriculture, Water and the Environment, Australian Government
DBCA	Department of Biodiversity, Conservation and Attractions, Western Australia
DEC	Department of Environment and Conservation, Western Australia (now DBCA and DWER)
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)
DoE	Department of the Environment, Australian Government (now DAWE)

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
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities (now DAWE)
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.