



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 8558/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Abra Mining Pty Ltd

1.3. Property details

Property: Miscellaneous Licence 52/198
Local Government Area: Shire of Meekatharra
Colloquial name: Abra Base Metals Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
45		Mechanical Removal	Aerodrome and associated infrastructure

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 22 August 2019

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description The vegetation of the application area is broadly mapped as the following Beard vegetation association:
18: Low woodland: mulga (*Acacia aneura*).

A flora and vegetation survey was conducted over the application area by Stantec during October 2018. The following five vegetation associations were recorded within the application area (Stantec, 2019):

- AcAcPISpSchS:** *Acacia citrinoviridis* (*Grevillea berryana*) low woodland over *Acacia citrinoviridis* and *Psyrax latifolia* (*Acacia aneura* and *Acacia ?ramulosa* var. *ramulosa*) tall shrubland over *Sida ?sp. spiciform panicles* (E. Leyland 14/08/90), *Senna cuthbertsonii* and *Hibiscus sturtii* var. *forrestii* open shrubland to shrubland.
Associated species:
Acacia incurvaneura, *Acacia kempeana*, *Aristida contorta*, *Cheilanthes sieberi*, *Eremophila forrestii* subsp. *?forrestii*, *Eriachne benthamii*, *Eriachne pulchella* subsp. *pulchella*, *Fimbristylis dichotoma*, *Hibiscus coatesii*, and *Solanum lasiophyllum*.
- AiAcEsp:** *Acacia incurvaneura* and *Acacia citrinoviridis* tall open shrubland over *Eremophila* spp. open shrubland.
Associated species:
Acacia ramulosa var. *ramulosa*, *Acacia rhodophloia*, *Acacia tetragonophylla*, *Eragrostis eriopoda*, *Grevillea berryana*, *Psyrax latifolia*, *Ptilotus schwartzii* and *Senna* sp. Meekatharra (E. Bailey 1-26).
- GbArrAiEf/GbArrExEjjEm:** Mosaic of:
A - *Grevillea berryana* open low woodland over *Acacia ?ramulosa* var. *ramulosa* and *Acacia incurvaneura* tall shrubland to open scrub over *Eremophila forrestii* subsp. *?forrestii* open low shrubland; and
B - *Grevillea berryana* open low woodland over *Acacia ?ramulosa* hybrid open shrubland to tall open shrubland over *Eremophila exilifolia* and *Eremophila jucunda* subsp. *jucunda* low shrubland over *Eriachne mucronata* very open tussock grassland to open tussock grassland.
Associated species:
Acacia citrinoviridis, *Acacia kempeana*, *Acacia ramulosa* var. *linophylla*, *Acacia rhodophloia*, *Aristida contorta*, *Eriachne pulchella* subsp. *pulchella* and *Ptilotus schwartzii*.
- AiArrEfEe:** *Acacia incurvaneura* and *Acacia ramulosa* var. *ramulosa* tall open shrubland over *Eremophila forrestii* open shrubland over *Eragrostis eriopoda* very open tussock grassland.
Associated species:
Acacia citrinoviridis, *Acacia kempeana*, *Acacia pruinocarpa*, *Acacia pteraneura*, *Acacia ramulosa* var. *linophylla*, *Acacia rhodophloia*, *Aristida contorta*, *Eremophila ?granitica*, *Eremophila citrina*, *Eremophila fraseri*, *Eremophila spectabilis*, *Eriachne mucronata*, *Eriachne pulchella* subsp. *pulchella*, *Grevillea berryana*, *Marsdenia australis*, *Psyrax latifolia*, *Ptilotus obovatus*, *Ptilotus schwartzii*, *Senna* sp. Meekatharra (E. Bailey 1-26), *Sida* sp. *Golden calyces* and *Solanum lasiophyllum*.

5. **AriApEspEe:** *Acacia ramulosa* var. *linophylla* and *Acacia pteraneura* tall shrubland over *Eremophila* spp. low shrubland over *Eragrostis eriopoda* open tussock grassland.
Associated species:
Acacia incurvaneura, *Acacia ramulosa* var. *ramulosa*, *Acacia rhodophloia*, *Aristida contorta*, *Grevillea berryana*, *Senna artemisioides* subsp. *helmsii*, *Senna* sp. Meekatharra (E. Bailey 1-26) and *Triodia basedowii*.

Clearing Description	Abra Base Metals Project. Abra Mining Pty Ltd proposes to clear up to 45 hectares of native vegetation within a boundary of approximately 264 hectares, for the purpose of an aerodrome and associated activities. The project is located approximately 180 kilometres south west of Newman, within the Shire of Meekatharra.
Vegetation Condition	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).
Comment	The vegetation condition was derived from a vegetation survey conducted by Stantec using a scale adapted from the Keighery scale and the Trudgen scale (Stantec, 2019; Keighery, 1994; Trudgen, 1991), and has been converted to the Keighery scale (Keighery, 1994). The proposed clearing is for the construction of an aerodrome runway, apron area and ancillary services (Abra Mining, 2019).

3. Assessment of application against Clearing Principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments	<p>Proposal is not likely to be at variance to this Principle</p> <p>The clearing permit application area is located within the Augustus subregion of the Interim Biogeographic Regionalisation for Australia (IBRA) Gascoyne Bioregion (GIS Database).</p> <p>The Augustus subregion is characterised by rugged low ranges divided by broad flat valleys, supporting Mulga woodland with <i>Triodia</i> on rises and Mulga on earthy loams over hardpan on the plains (CALM, 2002).</p> <p>The flora and vegetation survey recorded 55 flora taxa, from 26 genera, and 19 families (Stantec, 2019). The survey targeted conservation significant species identified during the desktop assessment (Stantec, 2019). However, no Threatened flora or Priority flora species were recorded during the survey (Stantec, 2019).</p> <p>There were no weed species recorded during the survey (Stantec, 2019). Clearing activities may spread or introduce weeds, which have the potential to out-compete native flora and reduce the biodiversity of an area. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.</p> <p>A desktop assessment identified 219 vertebrate fauna species as having the potential to occur within the application area, with 26 of the species listed as conservation significant (Stantec, 2019). However, it was determined that only one conservation significant species; Peregrine Falcon (<i>Falco peregrinus</i>) (OS), would possibly occur in the application area (Stantec, 2019). While the application area does not provide suitable nesting habitat, it may provide suitable foraging habitat, therefore, the Falcon may fly over the area from time to time (Abra Mining, 2019; Stantec, 2019). Other conservation significant species were assessed as unlikely to occur in the application area (Abra Mining, 2019; Stantec, 2019).</p> <p>The vegetation associations, fauna habitats and landform types present within the application area, are well represented in surrounding areas (Stantec, 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.</p> <p>Based on the above, the proposed clearing is not likely to be at variance to this Principle.</p>
Methodology	<p>Abra Mining (2019) CALM (2002) Stantec (2019)</p> <p>GIS Database:</p> <ul style="list-style-type: none"> - IBRA Australia - Pre-European Vegetation - Threatened Fauna - Threatened and Priority Flora - Threatened and Priority Ecological Communities Boundaries - Threatened and Priority Ecological Communities Buffers

(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 broad fauna habitats have been recorded within the application area (Stantec, 2019):

1. Drainage;
2. Open shrubland on sandy plain; and
3. Open shrubland on stony plain.

A desktop assessment identified 219 vertebrate fauna species as having the potential to occur within the application area, with 26 of the species listed as being of conservation significance (Stantec, 2019). These 26 species were assessed for likelihood of occurrence within the application area; based on habitat and known locations and species distribution (Abra Mining, 2019; Stantec, 2019). The assessment determined that one conservation significant species, Peregrine Falcon (*Falco peregrinus*) (OS), was likely to occur in the application area (Stantec, 2019). Although, the application area does not contain suitable nesting habitat, this species may intermittently forage within the application area (Stantec, 2019).

All habitats were considered to be a widespread, and no habitats were considered to be singularly important to species of conservation significant fauna assemblages (Stantec, 2019).

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

Methodology Abra Mining (2019)
Stantec (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). Flora surveys of the application area did not record any species of Threatened flora (Stantec, 2019).

The vegetation associations within the application area are common and widespread within the region (Stantec, 2019; 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 Stantec (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 (Stantec, 2019).

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

Methodology Stantec (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 Gascoyne Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 99% of the pre-European vegetation still exists in the IBRA Gascoyne Bioregion (Government of Western Australia, 2019). The application area is broadly mapped as Beard vegetation association 18: Low woodland; mulga (*Acacia aneura*) (GIS Database). Approximately 99% of the pre-European extent of this vegetation association remains uncleared at both the state and bioregional level (Government of Western Australia, 2019).

Therefore, the application area does not represent a significant remnant of native vegetation in an area that has been extensively cleared.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in DBCA managed lands
IBRA Bioregion – Gascoyne	18,075,219	18,06,441	~99	Least Concern	10
Beard vegetation associations – WA					
18	19,892,306	19,843,148	~99	Least Concern	6
Beard vegetation associations – Gascoyne Bioregion					
18	3,273,579	3,271,339	~99	Least Concern	9

* 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 (Stantec, 2019; GIS Database). One seasonal creek line passes through the application area (GIS Database). Creek lines in the region are dry for most of the year, with water flowing for a short duration following intermittent heavy rainfall (Abra Mining, 2019).

The vegetation growing in association with this seasonal creek line is defined as drainage line habitat, and this correlates with the flora survey descriptions of flora sampling sites where the landform was described as gullies and minor flow lines (Stantec, 2019; GIS Database). Based on the above, the proposed clearing is at variance to this Principle. However impacts to the vegetation growing in association with the watercourse are likely to be minimal.

Methodology Abra Mining (2019)
Stantec (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 is not likely to be at variance to this Principle

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

The Jamindie land system is described as stony rises with grooved mulga shrublands. This land system is inherently resistant to erosion (Payne et al., 1988).

The Three Rivers land system consists of broad hard plains with minor sandy banks and sparse mulga shrublands. This land system may be susceptible to erosion (Payne et al., 1988).

The Collier land system consists of undulating stony uplands, low hills and ridges and stony lower plains supporting mulga shrublands. This land system may be susceptible to erosion if vegetation cover is removed (Payne et al., 1988).

The proposed clearing of up to 45 hectares of native vegetation within a boundary of approximately 264 hectares, for the purpose of constructing an aerodrome 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 Payne 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 area. The nearest DBCA (formerly DPaW) managed land is the Collier Range National Park which is located approximately 4 kilometres east 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). Creek lines in the region are dry for most of the year; short duration water flows follow intermittent heavy rainfall (Abra Mining, 2019). 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 Abra Mining (2019)

GIS Database:

- Hydrography, Linear

- Public Drinking Water Source Areas

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

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

The climate of the region is semi-arid, with a low average rainfall of approximately 266 millimetres per year (BoM, 2019). Drainage lines in the area are dry for most of the year with water only flowing immediately following significant rainfall (Abra Mining, 2019).

There are no permanent water courses or waterbodies within the application area (GIS Database). Seasonal drainage lines are common in the region and temporary localised flooding may occur briefly following heavy rainfall events. However, the proposed clearing is unlikely to increase the incidence or intensity of natural flooding events.

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

Methodology Abra Mining (2019)
BoM (2019)

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 1 July 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 (WC1999/013) 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 area (DPLH, 2019). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

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

Methodology DPLH (2019)

4. References

- Abra Mining (2019) Purpose Clearing Permit Supporting Information for Abra Base Metals Project Mining Proposal. Report Abra Mining Pty Ltd, June 2019.
- BoM (2019) Bureau of Meteorology Website – Climate Data Online, Neds Creek (007103). Bureau of Meteorology. <http://www.bom.gov.au/climate/data/> (Accessed 16 August 2019).
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- DPLH (2019) Aboriginal Heritage Enquiry System. Department of Planning, Lands and Heritage. <http://maps.daa.wa.gov.au/AHIS/> (Accessed 16 August 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.
- 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.
- Payne, A.L., Mitchell, A.A., and Holman, W.F. (1988) An Inventory and Condition survey of the Rangelands in the Ashburton River Catchment, Western Australia. Technical Bulletin No. 62. Department of Agriculture, South Perth, Western Australia.
- Stantec (2019) Abra Airstrip: Flora, Vegetation and Fauna Surveys. Report prepared for Galena minerals Ltd, by Stantec Australia Pty Ltd, March 2019.

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	<i>Environmental Protection Act 1986</i> , Western Australia
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (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	<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 **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.