



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 8390/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **GSM Mining Company Pty Ltd**

1.3. Property details

Property: Mining Lease 38/397
Mining Lease 38/691
Mining Lease 38/849
Mining Lease 38/1280
Miscellaneous Licence 38/326

Local Government Area: Shire of Laverton
Colloquial name: Solar Power Farm Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
32.50		Mechanical Removal	Solar Farm and Power Station

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 24 April 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*) (GIS Database).

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

1. **Chenopod Shrubland- Drainage Line**
Maireana pyramidata, Cratystylis subspinescens, Hakea preissii, Lawrencina squamata;
2. **Open Mulga woodland over Chenopod shrubland**
Acacia aneura, A. mulganeura, A. masliniana, Hakea preissii, Eremophila glabra subsp. glabra, Atriplex bunburyana, Maireana pyramidata;
3. **Mulga over Ironstone outcrops**
Acacia mulganeura, A. aneura, A. ayersiana, Philotheca brucei subsp. brucei, Eremophila latrobei subsp. latrobei, Dodonaea viscosa subsp. angustissima, A. tetragonophylla;
4. **Mulga woodland over sandy plains**
Acacia ayersiana, A. pteraneura, Maireana pyramidata, Rhagodia drummondii, Aristida contorta, Eragrostis eriopoda, Solanum lasiophyllum, Enchylaena tomentosa var tomentosa; and
5. **Tecticornia shrubland**
Tecticornia disarticulata and Frankenia pauciflora.

Clearing Description Solar Power Farm Project
GSM Mining Company Pty Ltd (GSMC) proposes to clear up to 32.50 hectares of native vegetation within a boundary of approximately 143.6 hectares, for the purpose of construction of a solar power farm. The project is located approximately 25.5 kilometres south of Laverton, within the Shire of Laverton (Stantec, 2019).

Vegetation Condition Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).
To

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 Native Vegetation Solutions (NVS, 2019).

The proposed clearing is for a solar power station that will connect to the existing gas fired power station, to supplement existing power generation, to meet power requirements for mining production (Stantec, 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

Proposal is not likely to be at variance to this Principle

The clearing permit application area is located within the Eastern Murchison subregion of the Interim Biogeographic Regionalisation for Australia (IBRA) Murchison Bioregion (GIS Database). The subregion is characterised by its internal drainage and extensive areas of red sandplains, supporting Mulga woodlands, hummock grasslands, saltbush shrublands and Halosarcia shrublands (CALM, 2002).

A flora and vegetation survey of the application area was conducted by Native Vegetation Solutions (NVS) in October 2018. The survey recorded 66 flora species, from 37 genera and 20 families (NVS, 2019). No Threatened or Priority flora were identified in the application area (NVS, 2019). There is one Priority Ecological Community (PEC), Mount Jumbo Range vegetation complex (banded ironstone formation (BIF)) (Priority 3), within 1.5 kilometres of the application area (GIS Database). However, the PEC is not present within the application area, and the proposed clearing of native vegetation is unlikely to impact on PEC.

The survey also recorded *Cenchrus ciliaris* (Buffel grass) an introduced weed species in the application area (NVS, 2019). This species is not listed as a declared plant under the *Biosecurity and Agriculture Management Act 2007* (DPIRD, 2018; Stantec, 2019). However, clearing activities may spread and 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.

A fauna survey of the application area was conducted by Terrestrial Ecosystems in October 2018. The survey identified four broad fauna habitats (Terrestrial Ecosystems, 2018). The fauna habitats are abundant in the surrounding area, therefore, the fauna assemblages associated with these habitats are likely to be represented in the surrounding area (Terrestrial Ecosystems, 2018).

The vegetation associations, fauna habitats and landform types present within the application area are well represented in surrounding areas (NVS, 2019; Stantec, 2019; Terrestrial Ecosystems, 2018; GIS Database). Therefore, the application area is unlikely to represent an area of higher biodiversity than surrounding areas, in either a local or regional context.

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

Methodology

CALM (2002)
DPIRD (2018)
NVS (2019)
Stantec (2019)
Terrestrial Ecosystems (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 following four broad fauna habitats have been recorded within the application area (Terrestrial Ecosystems, 2018):

1. Open Mulga woodland over scattered low shrubs and grasses of varying densities on a stony sandy clay or sandy-clay substrate;
2. Open Chenopod shrubland over grasses of varying densities on a stony sandy-clay or sandy-clay

substrate;

3. Chenopod and Mulga shrubland over scattered grasses of varying densities on a stony sandy-clay or sandy-clay substrates; and
4. Banded ironstone rocky ridgeline with scattered Mulga and shrubs.

The ironstone formation habitat type is significant habitat for Long-tailed Dunnart (*Sminthopsis longicaudata*) (Priority 4) in the region (Terrestrial Ecosystems, 2018). This habitat type occurs in five locations within the application area and collectively covers approximately 1.5% of the application area (NVS, 2019; Terrestrial Ecosystems, 2018). Clearing of the ironstone formation habitat should be avoided and linkage corridors between these habitat areas retained to allow dunnart to move between rocky outcrops (Terrestrial Ecosystems, 2018). However, all the locations of this habitat type are outside the proposed disturbance envelope. Hence GSMC have committed to avoid clearing the ironstone formation habitat and will ensure some of this habitat type, and linkages, are retained (Stantec, 2019; GIS database).

The majority of the fauna habitats recorded in the application area are well represented in the adjacent area, the impacts from proposed clearing on the fauna, are likely to be low (Terrestrial Ecosystems, 2018).

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

Methodology NVS (2019)
Stantec (2019)
Terrestrial Ecosystems (2018)

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 area did not record any species of Threatened flora (NVS, 2019).

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

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

Methodology NVS (2019)
GIS Database:
- Threatened and Priority Ecological Communities Boundaries
- Threatened and Priority Ecological Communities Buffers

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

Comments Proposal is not at variance to this Principle

The application area falls within the Murchison Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 99% of the pre-European vegetation still exists in the IBRA Murchison Bioregion (Government of Western Australia, 2018). 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, 2018).

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

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in DBCA managed lands
IBRA Bioregion – Murchison	12,403,172	12,363,252	~99	Least Concern	4
Beard vegetation associations – WA					
18	19,892,306	19,843,729	~99	Least Concern	6
Beard vegetation associations – Murchison Bioregion					
18	12,403,172	12,363,252	~99	Least Concern	4

* Government of Western Australia (2018)

** 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 (2018)

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 may be 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, however, site drainage is predominately by way of sheet flow. This undefined sheet flow discharges directly into Lake Carey, approximately 0.5 kilometres south of the application area at its nearest point (AECOM, 2018; Stantec, 2019; GIS Database).

There is vegetation described as: Chenopod shrubland - Drainage line vegetation, growing in association with a minor seasonal creekline (NVS, 2018; Stantec, 2019; GIS Database).

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

Methodology AECOM (2018)
NVS (2018)
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 may be at variance to this Principle

The application area lies within the Bevon, Brooking, Monitor and Carnegie 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 Bevon land system is described as irregular low ironstone hills with stony lower slopes supporting mulga shrublands supporting. This drainage tracts in this land system are susceptible to erosion (Pringle et al., 1994).

The Brooking land system consists of prominent ridges of banded iron formation supporting mulga shrublands. This land system may be susceptible to erosion if stone mantles are removed (Pringle et al., 1994).

The Monitor land system consists of distributary alluvial fans and wash plains supporting mulga and chenopod shrublands. This land system may be susceptible to erosion if vegetation cover is removed (Pringle et al., 1994).

The Carnegie land system consists of salt lakes with fringing saline flats and dunes supporting low halophytic shrublands and scattered tall acacia shrublands. This land system is generally not susceptible to erosion (Pringle et al., 1994).

The proposed clearing of up to 32.50 hectares of native vegetation within a boundary of approximately 143.68 hectares, for the purpose of a solar power farm is unlikely to cause appreciable land degradation. However, where possible, vegetation should be progressively cleared to prevent soil erosion.

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

Methodology Pringle et al., (1994)

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 managed land is the De La Poer Range Nature Reserve, approximately 152 kilometres northeast 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, only flowing immediately after significant rainfall (AECOM, 2018; Stantec, 2019).

Drainage in the area is predominately by way of sheet flow, with undefined flow paths; flow discharges directly into Lake Carey, approximately 0.5 kilometres south of the application area at its nearest point (AECOM, 2018; Stantec, 2019; GIS Database). Potential decline in the quality of surface water may be minimised by the implementation of a drainage line management condition and a staged clearing condition.

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 AECOM (2018)
Stantec (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	<p>Proposal is not likely to be at variance to this Principle</p> <p>The climate of the region is semi-arid, with a low average rainfall at the nearest weather station at Laverton of approximately 303 millimetres per year (BoM, 2019). Creek lines in the area are dry for most of the year, have no distinct channel shape, and only flow briefly following significant rainfall (AECOM, 2018; Stantec, 2019).</p> <p>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.</p> <p>The proposed clearing is unlikely to increase the incidence or intensity of natural flooding events.</p> <p>Based on the above, the proposed clearing is not likely to be at variance to this Principle.</p>
Methodology	<p>AECOM (2018) BoM (2019) Stantec (2018)</p> <p>GIS Database: - Hydrographic Catchments - Catchments - Hydrography, linear</p>

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

Comments	<p>The clearing permit application was advertised on 25 March 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.</p> <p>There is one native title claim (WC2019/002) over the area under application (DPLH, 2019). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. However, the mining tenure has been granted in accordance with the future act regime of the <i>Native Title Act 1993</i> and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the <i>Native Title Act 1993</i>.</p> <p>There is one registered Aboriginal Site of Significance within the application area (DPLH, 2019). It is the proponent's responsibility to comply with the <i>Aboriginal Heritage Act 1972</i> and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.</p> <p>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.</p>
Methodology	<p>DPLH (2019)</p>

4. References

- AECOM (2018) GSM Flood Study. Report prepared for Aggreko Generators Pty Ltd, by AECOM Australia Pty Ltd, September, 2018.
- BoM (2019) Bureau of Meteorology Website – Climate Data Online, Weather Station Laverton. Bureau of Meteorology. <http://www.bom.gov.au/climate/data/> (Accessed 03 April 2019).
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- DPIRD (2019) Declared Plants. Department of Primary Industries and Regional Development. <https://www.agric.wa.gov.au/pests-weeds-diseases/weeds/declared-plants> (Accessed 04 April 2019).
- DPLH (2019) Aboriginal Heritage Enquiry System. Department of Planning, Lands and Heritage. <http://maps.daa.wa.gov.au/AHIS/> (Accessed 04 April 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 (2018) 2017 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of December 2017. WA Department of Biodiversity, Conservation and Attractions. <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.
- NVS (2019) Reconnaissance Flora and Vegetation Survey of the Proposed GSM Solar Farm October 2018 (L38/88, L38/326, M38/397, M38/691 & M38/849). Report prepared for GSM Mining Company Pty Ltd, by Native Vegetation Solutions, January 2019.
- Pringle H.J.R., Van Vreeswyk, A.M.E., and Gilligan S.A. (1994) An Inventory and Condition Survey of rangelands in the north-eastern Goldfields, Western Australia, Department of Agriculture, Western Australia.
- Stantec (2019) Granny Smith Gold Mine Solar Farm Native Vegetation Clearing Permit Application Supporting Document. Report prepared for Gold Fields Australia Pty Ltd, by Stantec Australia Pty Ltd, February 2019.
- Terrestrial Ecosystems (2018) Vertebrate Fauna Risk Assessment for the Granny Smith Solar Farm Power Project. Report prepared for Granny Smith Mining Company Pty Ltd, by Terrestrial Ecosystems, November 2018.

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.