



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6183/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Cassini Resources Limited**

1.3. Property details

Property:
Mining Lease 69/72
Mining Lease 69/73
Mining Lease 69/74
Mining Lease 69/75
Exploration Licence 69/1505
Exploration Licence 69/1530
Exploration Licence 69/2201

Local Government Area: Shire of Ngaanyatjaraku

Colloquial name: West Musgrave Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
59.5		Mechanical Removal	Mineral Exploration

1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 16 May 2019

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description The application area has been broadly mapped as the following three Beard vegetation associations (GIS Database):

- 18: Low woodland; mulga between sand ridges;
- 19: Low woodland; mulga (*Acacia aneura*); and
- 236: Hummock grasslands, shrub steppe; mulga and mallee (marble gum) over hard spinifex.

Several flora surveys have been conducted over the application area since 2001 (Cassini Resources, 2014). Western Botanical (2014) has undertaken a review of these surveys and has identified the following vegetation associations within the application area:

- Mulga woodlands and groves on hardpan plains;
- Mulga and grasses on Calcrete rises;
- Mulga over Wanderrie Grasses on shallow sand sheet;
- Sandplains with Spinifex;
- Sandplains with Mallee, Mulga and Spinifex; and
- Sand dunes with Grevillea and Acacia.

Clearing Description West Musgrave Project.
Cassini Resources Limited proposes to clear up to 59.5 hectares of native vegetation within a total boundary of approximately 23,427 hectares, for the purpose of mineral exploration. The project is located approximately 580 kilometres northwest of Laverton, in the Shire of Ngaanyatjaraku.

Vegetation Condition Pristine: No obvious signs of disturbance (Keighery, 1994);

to

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

Comment The vegetation condition was derived from vegetation surveys reviewed by Western Botanical (2014) and from analysis of aerial imagery.

Clearing permit CPS 6183/1 was granted by the Department of Mines and Petroleum (now the Department of

Mines, Industry Regulation and Safety) on 7 August 2014 and was valid from 30 August 2014 to 30 August 2019. The permit authorised the clearing of up to 29.5 hectares of native vegetation within a boundary of approximately 3,956 hectares, for the purpose of mineral exploration. Cassini Resources has applied to increase the clearing permit boundary to approximately 23,427 hectares.

The previous permit boundary fell wholly within the area covered by CPS 2028/2 which was granted to BHP Billiton Nickel West Pty Ltd (BHP) on 22 September 2011. Where possible Cassini Resources will utilise existing drill lines and tracks in this area.

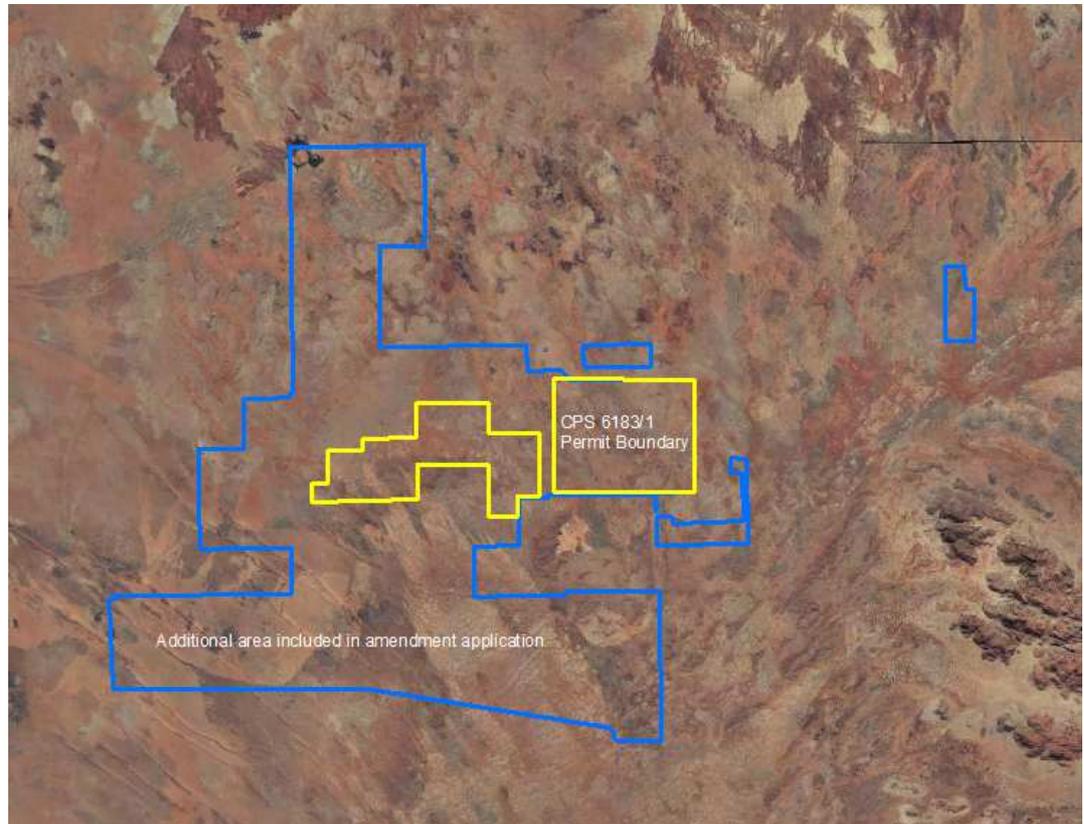


Figure 1: Original clearing permit boundary (yellow area) and proposed amended permit boundary (blue area)

3. Assessment of application against Clearing Principles

Comments

Cassini Resources has applied to amend the clearing permit boundary to include an additional area of approximately 19,471 hectares, increase the amount of clearing authorised to 59.5 hectares and extend the duration of the permit by an additional five years. Parts of the amended permit boundary cover areas which were granted under previous clearing permits held by BHP Billiton Nickel West Pty Ltd (CPS 2788/2) and BHP Billiton Minerals Pty Ltd (CPS 4631/2 and CPS 4698/1).

The permit area is located within the Central Ranges Interim Biogeographic Regionalisation of Australia (IBRA) bioregion, and the Central Ranges - Mann-Musgrave Block IBRA subregion (GIS Database). The Mann-Musgrave Block IBRA subregion, has been described as being rich and diverse in both its flora and fauna (CALM, 2002). However, most species are wide ranging and usually occur in at least one, and often several adjoining subregions (CALM, 2002).

There are no records of any Threatened flora species within the additional areas and no species of Threatened flora have been recorded from the Central Ranges bioregion (Western Australian Herbarium, 2019, GIS Database).

No species of Priority flora were recorded in the original permit boundary (Western Botanical, 2014; GIS Database). The species *Euphorbia parvicaruncula* (Priority 1) was previously recorded in the part of the additional area covered by previous permit CPS 4631/1 (Western Botanical, 2011). Further survey effort within the permit boundary has recorded *Aenictophyton anomalum* (Priority 1), *Indigofera warburtonensis* (Priority 1), *Amaranthus centralis* (Priority 3), *Goodenia asteriscus* (Priority 3) and *Stackhousia clementii* (Priority 3) (Western Botanical, 2018; GIS Database).

Euphorbia parvicaruncula was recorded as scattered individual plants during the flora survey that covered the CPS 4631/1 permit area (Western Botanical, 2011). It was recorded from areas of hardpan plains but was not common in the area (Western Botanical, 2011). *Euphorbia parvicaruncula* was classified as Priority 3 at the time of the 2011 survey but has since been reclassified as Priority 1. This species is poorly recorded in

Western Australia with only two records showing from the Western Australian Herbarium (2019). It is however, widely distributed throughout Central Australia with these records representing the western extent of this species (Australasian Virtual Herbarium, 2019).

Aenictophyton anomalum was recorded from one location within the additional area with over 20 individuals noted at the location (Western Botanical, 2018). There is a significant population of this species in the south-west corner of the Northern Territory and another population around the New South Wales / Queensland border (Australasian Virtual Herbarium, 2019). However, the Western Australian Herbarium only has one other record of this species (Western Australian Herbarium, 2019).

Indigofera warburtonensis is known from three records at the Western Australian Herbarium all 30 kilometres apart (DBCA, 2019; Western Australian Herbarium, 2019). There were two records of this species within the additional area (Western Botanical, 2018). There were 21 individuals recorded at these locations, although it was noted as being relatively common and full counts were not undertaken (Western Botanical, 2018).

These species listed as Priority 1 all have a restricted distribution within Western Australia and should be avoided when clearing is undertaken. Potential impacts to these species may be minimised by the implementation of a flora management condition.

Amaranthus centralis has been recorded from 10 locations within the permit boundary (Western Botanical, 2018). This species is known from six records at the Western Australian Herbarium (2019) from populations in the Pilbara and Central Ranges bioregions. There are also significant populations of this species in the Northern Territory and South Australia (Australasian Virtual Herbarium, 2019).

Goodenia asteriscus was recorded from four locations within the permit boundary (Western Botanical, 2018). This species was recorded from a further 24 locations outside of the permit boundary (Western Botanical, 2018). It is known from five records within the Central Ranges and Great Victoria Desert bioregions (Western Australian Herbarium, 2019).

Stackhousia clementii has a wide distribution within Western Australia ranging from Lake MacLeod through to the Central Ranges area (Western Australian Herbarium, 2019). This species has been recorded in large numbers (over 2,000 individuals) within the local area, with one recorded location within the additional area (Western Botanical, 2018).

The species of Priority 3 flora have a much greater distribution than the Priority 1 species and the proposed clearing is not likely to have a significant impact on the populations of these species.

Searches of available databases revealed several other species of Priority flora that, based on the vegetation and landforms present, could potentially be present within the amendment area (Western Australian Herbarium, 2019; GIS Database). Given the size of the permit area (approximately 23,427 hectares), there has only been a limited coverage by previous flora and vegetation surveys in the area. Despite the limited survey information over the amendment area, it is unlikely the proposed amendment will have a significantly greater impact on Priority flora species than what was authorised under previous permits. Potential habitat for these species is common and widespread in the region (GIS Database).

A fauna survey was undertaken in June and July 2018 which included part of the permit area and some adjacent areas outside of the permit boundary (Western Wildlife, 2018). The following nine fauna habitats were identified in the greater survey area:

- Sand dunes
- Spinifex sandplains
- Mallee sandplains
- Calcrete plains
- Mulga woodlands
- Mulga sandplains
- Stony hills and plains
- Chenopod shrublands
- Claypans

It was observed that there was some disturbance present in all habitats including drilling access tracks, roads and off-track driving (Western Wildlife, 2018). Feral camels were very common in the area and evidence of vegetation trampling was noted across the survey area (Western Wildlife, 2018). All of the habitats present are widely represented in the bioregion (Western Wildlife, 2018). Based on known records and the habitat present, there are a number of conservation significant fauna species which may be present within the amendment area.

The Great Desert Skink (*Liopholis kintorei* - Vulnerable) was recorded during the fauna survey from an area outside of the amended permit boundary (Oz Minerals, 2018; Western Wildlife, 2018). The Great Desert Skink is a large burrowing lizard that is found in desert areas within Western Australia, Northern Territory and South Australia. This species maintains an interconnected network of tunnels which can be up to 13 metres long and

have up to 20 entrances (Threatened Species Scientific Committee, 2016). This species was recorded in the spinifex sandplain habitat and may also be present within the adjacent dune swale habitats (Western Wildlife, 2018). When foraging they may move up to 100 metres from their burrow and have been known to move 10 kilometres to colonise new areas (DotEE, 2019). Cassini Resources has committed to avoiding clearing within 200 metres of burrows. Potential impacts to Great Desert Skink may be minimised by a fauna management condition requiring suitable habitat is searched prior to clearing and no clearing occurs within 200 metres of any burrows.

The Brush-tailed Mulgara (*Dasyercus blythi* - Priority 4) was recorded from numerous locations within the greater survey area including within the permit amendment area (Western Wildlife, 2018). The species occurs mostly within spinifex grasslands and is likely to utilise the spinifex sandplain, mulga sandplain and mallee sandplain habitats (Western Wildlife, 2018). It was noted during the fauna survey that the Brush-tailed Mulgara was particularly abundant within the spinifex sandplains habitat. Potential impacts to this species may be minimised by the implementation of a fauna management condition requiring suitable habitat is searched prior to clearing and no clearing occurs within 50 metres of any Brush-tailed Mulgara burrows.

Evidence of the Southern Marsupial Mole (*Notoryctes typhlops* - Priority 4) was found during the fauna survey through the observation of numerous back filled tunnels (Western Wildlife, 2018). The tunnels were observed in sand dunes outside of the permit boundary, however, this species is likely to occur in sand dunes within the permit boundary (Western Wildlife, 2018). There was over 2,500 hectares of sand dune habitat mapped over the greater flora survey area (Western Wildlife, 2018). The proposed clearing of 59.5 hectares within a permit boundary of approximately 23,427 hectares is not likely to have a significant impact on habitat for this species.

There are historical records of Malleefowl (*Leipoa ocellata* - Vulnerable) within 100 kilometres of the permit area (DBCA, 2019). No mounds or other evidence of Malleefowl was observed during the fauna survey (Western Wildlife, 2018). The local records are from the northern extent of the known range of Malleefowl in Western Australia and it is probable that its range has contracted and that Malleefowl is extinct in the local area (DBCA, 2019; Western Wildlife, 2018). However, as a large mobile bird species, it may potentially move into the region in times of high productivity (Western Wildlife, 2018). The habitat within the permit area is not likely to represent significant habitat for this species.

The Bilby (*Macrotis lagotis* - Vulnerable) has been recorded historically within 100 kilometres, and suitable habitat is present within the permit area (DBCA, 2019; Western Wildlife, 2018). No burrows or other evidence of Bilby was recorded during the fauna survey (Western Wildlife, 2018). If present, this species is likely to only be a scarce resident or may only occur in years of high productivity (Western Wildlife, 2018).

There are several other conservation significant fauna species which may be present within the permit area, however, the vegetation is not likely to represent significant habitat for these species (Western Wildlife, 2018). The faunal assemblage within the permit area is likely to be diverse with the fauna present dominated by species that favour sandy habitats (Western Wildlife, 2018). The proposed clearing of 59.5 hectares within a permit area of approximately 23,427 hectares is not likely to have a significant impact on habitat for fauna in the local area.

The application area is not within or in close proximity to a Public Drinking Water Source Area, and there are no permanent watercourses or wetlands within the additional permit areas (GIS Database). The proposed clearing is not likely to have a significant impact on any watercourses, surface water or ground water quality in the local area (GIS Database). The proposed amendment is not likely to result in appreciable land degradation.

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 may be at variance to Principle (b), is not likely to be at variance to Principles (a), (c), (d), (g), (h), (i) and (j) and is not at variance to Principles (e) and (f).

Methodology Australasian Virtual Herbarium (2019)
CALM (2002)
DBCA (2019)
DotEE (2019)
Oz Minerals (2018)
Threatened Species Scientific Committee (2016)
Western Australian Herbarium (2019)
Western Botanical (2011)
Western Botanical (2014)
Western Botanical (2018)
Western Wildlife (2018)

GIS Database:
- DPaW Tenure
- Hydrography, Linear

- IBRA Australia
- Imagery
- Landsystem Rangelands
- Pre-European Vegetation
- Public Drinking Water Source Areas
- Soils, Statewide
- Threatened and Priority Flora
- Threatened and Priority Ecological Communities boundaries
- Threatened and Priority Ecological Communities buffered
- Threatened Fauna

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

Comments

There is one Native Title claim 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 *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 is one registered Aboriginal Site 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.

The amendment application was advertised on 5 February 2018 by the Department of Mines, Industry Regulation and Safety, inviting submissions from the public. The application was readvertised on 3 December 2018 with the current area applied to clear. No submissions were received in relation to this application.

Methodology DPLH (2019)

4. References

- Australasian Virtual Herbarium (2019) The Australasian Virtual Herbarium, Council of Heads of Australasian Herbaria. <http://avh.chah.org.au/> (Accessed 5 May 2019).
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- DBCA (2019) NatureMap. Department of Parks and Wildlife. <http://naturemap.dec.wa.gov.au> (Accessed 8 March 2019).
- DPLH (2019) Aboriginal Heritage Enquiry System. Department of Planning, Lands and Heritage. <http://maps.daa.wa.gov.au/AHIS/> (Accessed 15 March 2019).
- DotEE (2019) Species Profile and Threats Database – *Liopholis kintorei*. Department of the Environment and Energy. http://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=83160 (Accessed 26 February 2019).
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Oz Minerals (2018) Supporting Information for Clearing Permit Amendment CPS 6183/2. Oz Minerals Limited, December 2018.
- Threatened Species Scientific Committee (2016) Approved Conservation Advice for *Liopholis kintorei* (Great Desert Skink). Department of the Environment and Energy, Canberra, 16 December 2016.
- Western Australian Herbarium (2019) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions. <https://florabase.dpaw.wa.gov.au/> (Accessed 6 May 2019).
- Western Botanical (2011) Flora and Vegetation Assessment, Gerar Study Area, Portion of E69/2201. Report prepared for BHP Billiton Ltd, by Western Botanical, September 2011.
- Western Botanical (2014) Desktop Assessment of Flora and Vegetation, Babel and Nebo Tenements, West Musgraves Region. Report prepared for Cassini Resources Ltd, by Western Botanical, June 2014.
- Western Botanical (2018) Detailed Flora and Vegetation Survey, West Musgrave Project: Draft Report. Report prepared for Oz Minerals Limited by Western Botanical, December 2018.
- Western Wildlife (2018) West Musgrave Project: Level 2 Vertebrate Fauna Survey June 2018 – Interim Report. Report prepared for Oz Minerals Ltd by Western Wildlife, September 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.

Principles for clearing native vegetation:

- (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.
- (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.
- (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare 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.
- (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.
- (f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.
- (g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.
- (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.
- (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.
- (j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.