



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 9337/1

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: APA Operations (WA) Pty Ltd

1.3. Property details

Property: Miscellaneous Licence 37/248

Local Government Area: Shire of Leonora

Colloquial name: King of the Hills Gas Pipeline

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
80		Mechanical Removal	Gas Pipeline

1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 16 September 2021

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 associations:
18: Low woodland; mulga (*Acacia aneura*); and
28: Open low woodland; mulga (GIS Database).

A flora and vegetation survey was conducted over the application area and surrounds by Mattiske Consulting (Mattiske) between 24-28 March 2020. The following vegetation types were recorded within the application area (Mattiske, 2020):

A1

Low woodland of *Acacia caesaneura* over mid open shrubland of *Acacia quadrimarginea*, *Acacia craspedocarpa* and *Eremophila margarethae* over low isolated clumps of *Ptilotus obovatus*, *Maireana* shrubs and other mixed shrubs on red/orange clay in drainage lines.

A2

Low Open Woodland of *Acacia caesaneura*, *Acacia craspedocarpa* - *Acacia tetragonophylla* over *Hakea preissii*, *Eremophila forrestii* subsp. *forrestii*, *Teucrium teucriiflorum*, *Ptilotus obovatus*, *Solanum lasiophyllum* over *Aristida contorta*, *Enneapogon caeruleus*, annual herbs and grasses on sandy-loams on flats and lower slopes.

A7

Low Open Woodland of *Acacia aneura* and other *Acacia* species over mixed shrubs over mixed chenopods, annual herbs and grasses on flats and lower slopes with calcrete soils.

C1

Open Chenopod Shrubland with *Atriplex* sp., *Maireana planifolia* and mixed *Sclerolaena* species with occasional emergent *Hakea preissii* and patches of *Acacia aneura* on calcrete soils.

E1

Open Woodland of *Eucalyptus camaldulensis* var. *obtusa* with pockets of *Casuarina* and *Acacia caesaneura* over *Grevillea ?nematophylla*, *Bossiaea walkeri* over mixed grasses and annual herbs on sandy soils in creeklines.

Clearing Description

King of the Hills Gas Pipeline.

APA Operations (WA) Pty Ltd proposes to clear up to 80 hectares of native vegetation within a boundary of approximately 272.953 hectares, for the purpose of a gas pipeline. The project is located approximately 26 kilometres northwest of Leonora, within the Shire of Leonora.

Vegetation Condition	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994). to Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994).
Comment	The vegetation condition was derived from a vegetation survey conducted by Mattiske (2020). The proposed clearing is for the installation of a gas pipeline from the King of the Hills mine site (Tarmoola delivery station) to the Goldfields Gas Pipeline (APA, 2021). The proposed clearing will also include other associated infrastructure such as workspace areas for construction, turning bays, laydown areas, and a pipeline service road for operations (APA, 2021).

3. Assessment of application against Clearing Principles

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

Comments	<p>Proposal is not likely to be at variance to this Principle</p> <p>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 Eastern Murchison subregion is characterised by internal drainage, and extensive areas of elevated red desert sandplains with minimal dune development (CALM, 2002). The salt-lake systems are associated with the occluded Paleodrainage system (CALM, 2002). The vegetation is dominated by Mulga Woodlands often rich in ephemerals; hummock grasslands, saltbush shrublands and <i>Tecticornia</i> shrublands (CALM, 2002).</p> <p>A flora and vegetation assessment of part of the application area and surrounds was conducted by Mattiske Consulting during 24-28 March 2020 (Mattiske, 2020). The vegetation of the application area was dominated by Acacia woodland, chenopod shrublands and <i>Eucalyptus</i> woodland (Mattiske, 2020). No Threatened or Priority Ecological Communities were identified as potentially occurring in the application area and the field assessment of part of the application did not record any (GIS Database; APA, 2021; Mattiske, 2020).</p> <p>A total of 67 flora taxa from 43 genera and 24 families were recorded within the application area and surrounds during the field assessment (Mattiske, 2020). Four conservation significant flora species may potentially occur within the application area based on suitable habitat, including one potentially undescribed flora species (Mattiske, 2020). Priority flora species <i>Frankenia georgei</i> (P1) was recorded within the nearby surrounds of the greater King of the Hills project, however the proposed clearing is unlikely to impact this species suitable habitat is limited within the pipeline corridor (Mattiske, 2020). No Priority flora species were recorded within the application during the field assessment, and no Threatened flora were determined to be potentially occurring within the application area and none were recorded during the field assessment (Mattiske, 2020). The proposed clearing is unlikely to impact the conservation status of any flora species.</p> <p>A level 2 fauna survey recorded a total of 93 fauna species within the application area and surrounds (Terrestrial Ecosystems, 2020). This includes three amphibian, 53 bird, four mammal and 33 reptile species (Terrestrial Ecosystems, 2020). No conservation significant fauna species were recorded within the application area or surrounds (Terrestrial Ecosystems, 2020). Several conservation significant fauna species may infrequently visit the application area, however none were considered to be reliant upon the application area for habitat (Terrestrial Ecosystems, 2020). The degraded nature of the application area has likely resulted in a loss of biodiversity within the application area and surrounds (APA, 2021; Terrestrial Ecosystems, 2020).</p> <p>The vegetation associations, fauna habitats and landform types present within the application area, are well represented in surrounding areas (APA, 2021; Mattiske, 2020; Terrestrial Ecosystems, 2020; GIS Database). The application area is unlikely to represent an area of higher biodiversity than surrounding areas, in either a local or regional context. The narrow and linear nature of the proposed clearing is unlikely to be significant, as there is similar adjacent habitat and the corridor unlikely supporting a higher level of biodiversity than in the surrounding area.</p> <p>Based on the above, the proposed clearing is not likely to be at variance to this Principle.</p>
Methodology	<p>APA (2021) CALM (2002) Mattiske (2020) Terrestrial Ecosystems (2020)</p> <p>GIS Database: - IBRA Australia - Pre-European Vegetation - Threatened and Priority Ecological Communities Boundaries - Threatened and Priority Ecological Communities Buffers - Threatened and Priority Flora - Threatened Fauna</p>

(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.

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

A level 2 vertebrate fauna survey was conducted in spring 2019 of the application area and surrounds by Terrestrial Ecosystems (2020). The following two fauna habitats have been recorded within the application area (Terrestrial Ecosystems, 2020):

- open mulga woodland over mixed shrubs and scattered grasses or bare ground; and
- woodland of large eucalypts over mixed shrubs and scattered grasses along the ephemeral creekline (Sullivan's Creek) that runs north-south through the application area.

The condition of these fauna habitats varies from good to highly degraded (Terrestrial Ecosystems, 2020). The application area and surrounds have been heavily grazed by cattle and goats, resulting in many grasses and lower vegetation being lost, depleted or altered (APA, 2021; Terrestrial Ecosystems, 2020).

The creekline habitat may provide a movement pathway for some avifauna and terrestrial mammals, reptiles, and amphibians over a period of many years (Terrestrial Ecosystems, 2020). The proposed clearing of this habitat is minimal, comprising a maximum of approximately 1.5 hectares within the application area (Terrestrial Ecosystems, 2020; GIS Database).

The two fauna habitats present within the application area are common and widespread within the region, and are in similar condition in adjacent areas (Terrestrial Ecosystems, 2020). The fauna assemblage within the application area is likely reflected in surrounding areas (Terrestrial Ecosystems, 2020). It is not expected that the proposed clearing of either fauna habitats will have a significant impact on fauna assemblages, or considered critical habitat for any conservation significant fauna species (Terrestrial Ecosystems, 2020).

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

Methodology APA (2021)
Terrestrial Ecosystems (2020)

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, threatened 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 (APA, 2021; Mattiske, 2020).

The vegetation associations within the application area are common and widespread within the region (Mattiske, 2020; GIS Database), and the vegetation proposed to be cleared is unlikely to be necessary for the continued existence of any species of Threatened flora.

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

Methodology APA (2020)
Mattiske (2020)

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 (APA, 2021; Mattiske, 2020).

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

Methodology APA (2021)
Mattiske (2020)

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, 2019). The application area is broadly mapped as Beard vegetation associations 18: Low woodland; mulga (*Acacia aneura*) and 28: Open low woodland; mulga (GIS Database). Approximately 98-99% of the pre-European extent of each of these vegetation associations 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 – Murchison	28,120,586	28,044,823	~99	Least Concern	7.78
Beard vegetation associations – WA					
18	19,892,306	19,843,148	~99	Least Concern	6.62
28	395,895	392,171	~99	Least Concern	N/A
Beard vegetation associations – Murchison Bioregion					
18	12,403,172	12,363,252	~99	Least Concern	4.96
28	224,291	220,583	~98	Least Concern	N/A

* 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 (APA, 2021; GIS Database). Several drainage lines pass through the application area, including Sullivan’s Creek (APA, 2021; GIS Database). Drainage lines in the region are dry for most of the year, only flowing briefly immediately following significant rainfall (APA, 2021; BoM, 2021). Vegetation type E1 is growing in association with these drainage lines, including Sullivan’s Creek (Mattiske, 2020). Impacts to riparian vegetation will be confined to the narrow and linear pipeline corridor, and therefore likely to be minimal in a regional context.

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

Methodology APA (2021)
BoM (2021)
Mattiske (2020)

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 Jundee, Monk, and Wilson 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 Jundee land system is described as hardpan plains with ironstone gravel mantles, supporting mulga shrublands (Payne et al., 1998). Soil erosion can be initiated where tracks and diversion structures harvest water on sloping land (Payne et al., 1998).

The Monk land system is described as hardpan plains with occasional sandy banks, supporting mulga tall shrublands and wanderrrie grasses (Payne et al., 1998). Drainage tracts are mildly susceptible to water erosion (Payne et al., 1998).

The Wilson land system consists of large creeks with extensive distributary fans, supporting mulga and halophytic shrublands (Payne et al., 1998). Large proportions of this land system are severely degraded and eroded (Payne et al., 1998). Drainage tracts, alluvial fans and hardpan plains are most extensively eroded (Payne et al., 1998). The vegetation of this land system is highly preferred for grazing by introduced and native animals, rendering it susceptible to overgrazing and consequent degradation (Payne et al., 1998).

The proposed clearing of up to 80 hectares of native vegetation may cause appreciable land degradation. Potential impacts from erosion may be minimised by the implementation of a staged clearing condition.

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

Methodology Payne et al. (1998)

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 former Bulga Downs Pastoral Lease which is located approximately 79 kilometres west 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). Drainage lines in the region are dry for most of the year, only flowing briefly immediately following significant rainfall. 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 (APA, 2021).

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

Methodology APA (2021)

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 arid, with an average rainfall of approximately 236.4 millimetres per year (APA, 2021; BoM, 2021; CALM, 2002). Drainage lines in the area are dry for most of the year, only flowing briefly immediately following significant rainfall (BoM, 2021).

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 APA (2021)
BoM (2021)
CALM (2002)

GIS Database:
- Hydrography, linear

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

Comments

The clearing permit application was advertised on 20 July 2021 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 (WC2018/005) over the area under application (DPLH, 2021). 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, 2021). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

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

Methodology DPLH (2021)

4. References

- APA (2021) King of the Hills Native Vegetation Clearing Permit. Native Vegetation Clearing Permit Supporting Document. Prepared by APA Operations (Perth) Pty Ltd, for Red 5 Limited, July 2021.
- BoM (2021) Bureau of Meteorology Website – Climate Data Online, Leonora. Bureau of Meteorology. <http://www.bom.gov.au/climate/data/> (Accessed 7 September 2021).
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- DPLH (2021) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS> (Accessed 7 September 2021).
- 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.
- Mattiske (2020) Assessment of Flora and Vegetation Values King of the Hills Mine Expansion, Leonora, WA. Prepared by Mattiske Consulting Pty Ltd, for Red 5 Limited, May 2020.
- Payne, A.L., Van Vreeswyk, A.M.E., Pringle, H.J.R., Leighton, K.A and Hennig, P (1998) Technical Bulletin No. 90: An inventory and condition survey of the Sandstone-Yalgoo-Paynes Find area, Western Australia. Department of Agriculture, Western Australia, South Perth.
- Terrestrial Ecosystems (2020) Level 2 Vertebrate Fauna Assessment King of the Hills Project. Prepared by Terrestrial Ecosystems, for Red 5 Limited, May 2020.

5. Glossary

Acronyms:

BC Act	<i>Biodiversity Conservation Act 2016</i> , Western Australia
BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia (now DPLH)
DAFWA	Department of Agriculture and Food, Western Australia (now DPIRD)
DAWE	Department of Agriculture, Water and the Environment, Australian Government
DBCA	Department of Biodiversity, Conservation and Attractions, Western Australia
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)
DoEE	Department of the Environment and Energy (now DAWE)
DoW	Department of Water, Western Australia (now DWER)
DPaW	Department of Parks and Wildlife, Western Australia (now DBCA)
DPIRD	Department of Primary Industries and Regional Development, Western Australia
DPLH	Department of Planning, Lands and Heritage, Western Australia
DRF	Declared Rare Flora (now known as Threatened Flora)
DWER	Department of Water and Environmental Regulation, Western Australia
EP Act	<i>Environmental Protection Act 1986</i> , Western Australia
EPA	Environmental Protection Authority, 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.