



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 9097/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Yilgarn Iron Pty Ltd

1.3. Property details

Property: Mining Lease 77/606
Mining Lease 77/990
Mining Lease 77/1038
Local Government Area: Shire of Yilgarn
Colloquial name: Koolyanobbing and Windarling powerline and warehouse expansion

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
8.72		Mechanical Removal	Expanding powerline corridors and a warehouse area

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 23 December 2020

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	<p>The vegetation of the application area is broadly mapped as the following Beard vegetation associations (GIS Database): 18: Low woodland; mulga (<i>Acacia aneura</i>); and 141: Medium woodland; York gum, salmon gum & gimlet.</p> <p>A flora and vegetation reconnaissance survey was conducted over the application area by Ecotec Environmental Management (Ecotec) during August to September 2020. The following vegetation associations were recorded within the application area (Ecotec, 2020):</p> <ul style="list-style-type: none">▪ Koolyanobbing Eucalypt Open Woodland: Mid woodland of mixed species including <i>Eucalyptus salmonophloia</i>, <i>Eucalyptus corrugata</i>, <i>Eucalyptus salubris</i>, <i>Eucalyptus longicornis</i> and <i>Eucalyptus vittata</i> over tall to mid sparse shrubland dominated by <i>Atriplex nummularia</i>, <i>Exocarpos aphyllus</i>, <i>Eremophila scoparia</i>, <i>Scaevola spinescens</i> and <i>Senna artemisioides</i> subsp. <i>filifolia</i> over low sparse shrubland dominated by <i>Atriplex vesicaria</i>, <i>Maireana trichoptera</i>, <i>Olearia muelleri</i>, <i>Sclerolaena diacantha</i> and <i>Rhagodia drummondii</i> on red, brown, orange or red-brown clay, clay loam and sandy loam with dolerite, quartz and ironstone stones on plains, flats and low rises.▪ Koolyanobbing Salt Lake Fringe: Highly Disturbed area with little vegetation.▪ Windarling Eucalypt Open Woodland: Dominated by <i>Eucalyptus longissima</i> and <i>E. corrugata</i> with an understorey of <i>Acacia</i> and <i>Eremophila</i> shrubland.▪ Windarling Acacia Shrubland: Dominated by <i>Acacia caesaneura</i>, <i>A. acuminata</i>, <i>A. burkittii</i> and <i>A. cockertoniana</i>.
Clearing Description	<p>Koolyanobbing and Windarling powerline and warehouse expansion. Yilgarn Iron Pty Ltd (Yilgarn Iron) proposes to clear up to 8.72 hectares of native vegetation, for the purpose of expanding powerline corridors and a warehouse area. The project is located between approximately 50 to 150 kilometres north of Southern Cross, within the Shire of Yilgarn.</p>
Vegetation Condition	<p>Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).</p> <p>To</p> <p>Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).</p>
Comment	<p>The vegetation condition was derived from a vegetation survey conducted by Ecotec (2020).</p>

The operations mine and process iron ore, which is then transferred by rail to port for export. The proposed clearing is to enable widening of existing powerline maintenance corridors at Windarling and Koolyanobbing, and the construction of centralised warehouse to support mining operations at Koolyanobbing.

The Koolyanobbing part of the application area is located approximately 50 km north of Southern Cross, while the Windarling part is located approximately 100 km north of Koolyanobbing.

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**

Both the Windarling and Koolyanobbing parts of the permit application area are located within the Southern Cross subregion of the Interim Biogeographic Regionalisation for Australia (IBRA) Coolgardie Bioregion (GIS Database). The Southern Cross subregion is characterised by a subdued relief, comprising gently undulating uplands dissected by broad valleys with bands of low greenstone hills. The subregion features diverse *Eucalyptus* woodlands (*Eucalyptus salmonophloia*, *E. salubris*, *E. transcidentalis*, *E. longicornis*) and is rich in endemic eucalypts that occur around salt lakes, on the low greenstone hills, valley alluvials and broad plains of calcareous earths. The scrubs are rich in endemic acacias and Myrtaceae (CALM, 2002).

The flora and vegetation survey conducted over the application area (Ecotec, 2020) identified a total of 111 species of native flora from 37 families, which were recorded during the surveys across all the sites, with the most abundant families being Fabaceae and Chenopodiaceae with 11 and 16 species recorded respectively. The Koolyanobbing surveys resulted in identification of 82 species of native flora, while 49 flora species were recorded at Windarling.

The application area does not overlap with any available database records of conservation significant flora (DBCA, 2007-; Western Australian Herbarium, 1998-) and none were recorded with the application area during the survey (Ecotec 2020).

At Koolyanobbing, the Eucalypt Open Woodland vegetation is well represented in the surrounding area and does not provide significant habitat for fauna species of conservation significance (Ecotec 2020). At Windarling the Eucalypt Open Woodland and *Acacia* Shrubland vegetation types are well represented in the surrounding area and do not provide significant habitat for any fauna species of conservation significance (Ecotec 2020).

A total of 17 introduced flora species (weeds) were recorded across the survey areas, all of these being located at Koolyanobbing, within the former town site (Ecotec, 2020). These include the Declared Pests and Weed of National Significance: Athel pine (*Tamarix aphylla*) and Prickly pear (*Opuntia stricta*). Weeds have the potential to alter the biodiversity of an area and care should be taken to ensure that weeds infestations are not exacerbated as a result of clearing activities. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

The vegetation associations, fauna habitats and landform types present within the application area, are well represented in surrounding areas (Ecotec, 2020; GIS Database). The Windarling part of the application area is adjacent to existing access roads, while the Koolyanobbing part of the application area is located adjacent to the accommodation camp car park and an existing mine access road. The application area displays significant pre-existing disturbance 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 of native vegetation is not likely to be at variance to this Principle.

Methodology CALM (2002)
DBCA (2007-)
Ecotec (2020)
Western Australian Herbarium (1998-)

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

(b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.

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

The following habitat types were recorded as part of the field flora and vegetation surveys (Ecotec, 2020):

- Eastern end of the Koolyanobbing site – Features flood-prone depressions and flats that support myrtaceous shrub communities;
- The powerline corridors at both sites – The corridors are very narrow (i.e. approximately 20 meters) and have been subject to significant disturbance. The corridors are generally devoid of larger trees and do not support any dense stands of vegetation; and
- The Koolyanobbing warehouse expansion site – The area was mostly cleared of native vegetation for construction of housing. A number of large trees, some dead, are found throughout the area but lower level vegetation comprises predominately low weed species.

The fauna habitats and landform types present within the application area are well represented in surrounding areas (Ecotec, 2020; GIS Database). The Windarling part of the application area is adjacent to existing access roads, while the Koolyanobbing part of the application area is located adjacent to the accommodation camp car park and an existing mine access road. The various parts of the application area display significant pre-existing disturbance is unlikely to represent significant fauna habitat (Ecotec, 2020).

Based on searches of available databases, several fauna species of conservation significant fauna have been recorded or have the potential to occur within 10 kilometres of the Koolyanobbing and Windarling areas (DAWE, 2020; DBCA, 2007-). The Eastern end of the Koolyanobbing area may have provided habitat suitable for the tree-stem trapdoor spider (*Aganippe castellum*, P4) prior to commencement of the mining operation, however this is now considered unlikely to be suitable due to disturbance (Ecotec, 2020). The Malleefowl (*Leipoa ocellata*, VU) is known to occur throughout the region, however there is no suitable nesting habitat present within the restricted parts of the application area (Ecotec, 2020). Some of the other species identified may potentially utilise the area as part of a broader foraging habitat, however given the size and existing condition of the area, it is unlikely to represent significant habitat for these species (Ecotec, 2020).

Based on the above, the proposed clearing of 8.72 hectares of native vegetation is not likely to be at variance to this Principle.

Methodology DAWE (2020)
DBCA (2007-)
Ecotec (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, rare flora.

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

There are no known records of Threatened flora within the application area (GIS Database). Flora surveys of the application area did not record any species of Threatened flora (Ecotec, 2020).

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

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

Methodology Ecotec (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 in close proximity to the application area (Ecotec, 2020).

Based on the above, the proposed clearing of 8.72 hectares of native vegetation is not likely to be at variance to this Principle.

Methodology Ecotec (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 Coolgardie Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 97% of the pre-European vegetation still exists in the IBRA Coolgardie Bioregion (Government of Western Australia, 2019). The application area is broadly mapped as Beard vegetation associations 18: Low woodland; mulga (*Acacia aneura*); and 141: Medium woodland; York gum, salmon gum & gimlet (GIS Database). Approximately 82% to 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 – Coolgardie	12,912,204	12,648,491	~97	Least Concern	16
Beard vegetation associations – WA					
18	19,892,306	19,843,148	~99	Least Concern	6
141	1,158,760	960,755	~82	Least Concern	35
Beard vegetation associations – Coolgardie Bioregion					
18	15,973	15,887	~99	Least Concern	99
141	899,059	874,403	~97	Least Concern	46

* 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 not at variance to this Principle**

There are no watercourses or wetlands within the area proposed to clear (GIS Database), nor was any native vegetation associated with a watercourse or wetland identified as part of the field surveys (Ecotec, 2020).

Based on the above, the proposed clearing the proposed clearing of 8.72 hectares of native vegetation is not at variance to this Principle.

Methodology Ecotec (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 is not likely to be at variance to this Principle

The Windarling part of the application area lies within the Moriarty land system (GIS Database). This land system has been mapped and described in technical bulletins produced by the former Department of Agriculture (now the Department of Primary Industries and Regional Development, DPIRD).

The Moriarty land system is described as low greenstone rises and stony plains supporting halophytic and acacia shrublands with patchy eucalypt over storeys (Payne et al, 1998). This land system is composed of mainly erosional surfaces (Payne et al, 1998).

The Koolyanobbing part of the application area does not lie within a DPIRD described land system, however soils found in the area are described by Northcote et al (1960) as ranges with numerous rock outcrops containing basic igneous rocks (greenstones), where the chief soils seem to be shallow loams.

The Windarling part of the application area is adjacent to existing roads, while the Koolyanobbing part of the application area is located adjacent to the accommodation camp car park and an existing mine access road. In this context, the proposed clearing of up to 8.72 hectares of native vegetation is unlikely to cause appreciable land degradation.

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

Methodology Northcote et al (1960)
Payne et al (1998)

GIS Database:
- Landsystem Rangelands
- Soils, Statewide

(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 Mount Manning - Helena and Aurora Ranges Conservation Park, which is located approximately 30 kilometers north of Koolyanobbing and 7 kilometers east of Windarling. 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 briefly immediately following significant rainfall. The proposed clearing of up to is unlikely to result in significant changes to surface water flows.

Groundwater is estimated to be 20 to 50 meters below the ground level along the application area (Ecotec, 2020), and 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 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 for the application area is characterised by hot, dry summers and cold winters. Rainfall occurs throughout the year with approximately 302 millimetres annually, occurring during an average of 44 rainfall days per year (CALM, 2002). Drainage lines in the area are sparse and dry for most of the year, only flowing briefly immediately following significant rainfall (CALM, 2002; Payne et al, 1998)

There are no permanent water courses or waterbodies within the application area (GIS Database), which are associated with already established infrastructure footprints.

The Windarling part of the application area is adjacent to existing roads with surface water runoff flowing generally toward the drainage system already associated with these roads. The Koolyanobbing part of the application area is located adjacent to the accommodation camp car park and an existing mine access road. Runoff from these areas will flow toward the drainage networks associated with the existing infrastructure. The proposed clearing is unlikely to increase the incidence or intensity of natural flooding events in those areas.

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

Methodology BoM (2020)
CALM (2002)
Payne et al (1998)

GIS Database:
- Hydrographic Catchments - Catchments
- Hydrography, linear

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

Comments

The clearing permit application was advertised on 16 November 2020 by the Department of Mines, Industry Regulation and Safety (DMIRS), inviting submissions from the public. No submissions were received in relation to this application.

There is one native title claims (WC2017/007) over the area under application (DPLH, 2020). 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 are no registered Aboriginal Sites of Significance within the application area (DPLH, 2020). 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 (2020)

4. References

- BoM (2020) Bureau of Meteorology Website – Climate Data Online, Southern Cross Airfield. Bureau of Meteorology. <http://www.bom.gov.au/climate/data/> (Accessed 22 December 2020).
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- DAWE (2020) EPBC Act Protected Matters Search Tool. Department of Agriculture, Water and the Environment. <https://www.environment.gov.au/epbc/protected-matters-search-tool> (Accessed 22 December 2020).
- DBCA (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Biodiversity, Conservation and Attractions. <https://naturemap.dbca.wa.gov.au/> (Accessed 22 December 2020).
- DPLH (2020) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS> (Accessed 22 December 2020).
- 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.
- Ecotec (2020) Koolyanobbing and Windarling Powerline Corridors and Koolyanobbing Warehouse Expansion Reconnaissance Flora, Vegetation and Fauna Habitat Assessment – September/October 2020. Report prepared for Mineral Resources Ltd by Ecotec Environmental Management, October 2020.

- Government of Western Australia (2019) 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions, Perth.
<https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics>
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.
- Payne, A L, van Vreeswyk, A M, Leighton, K A, Pringle, H J, and Hennig, P. (1998) An inventory and condition survey of the Sandstone-Yalgoo-Paynes Find area, Western Australia. Department of Agriculture and Food, Western Australia. Technical Bulletin 90.
- Western Australian Herbarium (1998-) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions. <https://florabase.dpaw.wa.gov.au/> (Accessed 22 December 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.