



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 8087/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Big Bell Gold Operations Pty Ltd

1.3. Property details

Property:

- Mining Lease 20/17
- Mining Lease 20/21
- Mining Lease 20/22
- Mining Lease 20/78
- Mining Lease 20/99
- Mining Lease 20/102
- Mining Lease 20/103
- Mining Lease 20/104
- Mining Lease 20/171
- Mining Lease 20/192
- Mining Lease 20/202
- Mining Lease 20/218
- Mining Lease 20/252
- Mining Lease 20/256
- Mining Lease 20/297
- Mining Lease 20/299
- Mining Lease 20/301
- Mining Lease 20/332
- Mining Lease 20/354
- Mining Lease 20/456
- Mining Lease 21/7
- Mining Lease 21/14
- Mining Lease 21/44
- Mining Lease 21/49
- Mining Lease 21/65
- Mining Lease 21/75
- Mining Lease 21/89
- Mining Lease 21/96
- Miscellaneous Licence 20/21
- Miscellaneous Licence 20/40

Local Government Area: Shire of Cue
Colloquial name: Central Murchison Gold Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
319		Mechanical Removal	Mineral Production and Associated Activities

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 30 July 2020

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*);
39: Shrublands; mulga scrub;
125: Bare areas; salt lakes;

- 240:** Succulent steppe with open scrub; scattered *Acacia sclerosperma* and bowgada over saltbush and bluebush;
268: Succulent steppe with open scrub; scattered *Acacia sclerosperma* over saltbush and bluebush;
313: Succulent steppe with open scrub; scattered *Acacia sclerosperma* and *Acacia victoriae* over bluebush;
1127: Mosaic: Saltbush and bluebush/samphire; and
2081: Shrublands; bowgada and associated spp. scrub (GIS Database).

A Level 1 flora and vegetation survey was conducted over the Big Bell and Day Dawn sections of application area by Outback Ecology during November 2011. The following vegetation associations were recorded within the Big Bell and Day Dawn sections of the application area (Outback Ecology, 2012):

Big Bell Area

1. *Acacia aneura* low woodland over *Eremophila phyllopoda* open shrubland over *Enneapogon caerulescens* very open tussock grassland on quartz outcrops;
2. *Acacia aneura* low open woodland over *Ptilotus rotundifolius* open shrubland over *Ptilotus* species low open shrubland over *Aristida contorta* tussock grassland;
3. *Acacia aneura* low open woodland over scattered low shrubs over *Aristida contorta* tussock grassland;
4. *Acacia aneura* low woodland (variable cover on banks of flow line) over *Acacia tetragonophylla* and *Eremophila* species scattered tall shrubs/shrubs over *Aristida contorta* and *Eragrostis falcata* (in bed of sandy flow line) tussock grassland; and
5. Mixed *Acacia* low woodland over scattered tall shrubland (on flow line banks) over open tussock grassland on sandy flow line channel.

Day Dawn Area

6. *Acacia cyperophylla* var. *cyperophylla* tall shrubland over *Eremophila longifolia* open shrubland over **Cenchrus ciliaris*, **Cynodon dactylon* tussock grassland in relatively well defined flow lines;
7. *Acacia aneura* low open woodland over *Acacia tetragonophylla* tall open shrubland over herbland in poorly defined flow lines;
8. Mixed *Acacia* tall open shrubland over *Eremophila phyllopoda* open shrubland – shrubland over *Ptilotus obovatus* low open shrubland over *Aristida contorta* very open tussock grassland on low basalt and dolerite rocky rises;
9. *Acacia xiphophylla*, *Acacia synchronicia* tall open shrubland over mixed scattered low shrubs over *Eriachne* and *Digitaria* very open tussock grassland. Found on broad drainage areas intersected by sometimes shallowly incised flow lines;
10. *Eremophila phyllopoda* open shrubland over *Tecticornia disarticulata* low open shrubland over *Enneapogon caerulescens* and *Acacia contorta* open tussock grassland on a water washed plain;
11. *Acacia aneura* low open woodland over *Hibiscus sturtii* var. *grandiflorus* low open to open shrubland over *Eragrostis lanipes* open grassland. Found on red sand dunes;
12. *Eremophila eriocarpa* shrubland over *Chenopodium gaudichaudianum* low shrubland over *Aristida contorta* open tussock grassland;
13. *Tecticornia halocnemoides* open to closed heath over scattered *Dissocarpus paradoxus*. Found on deep saline clay flats with cracking surface;
14. *Tecticornia indica* subsp. *bidens* and *Tecticornia doleiformis* low open heath over *Frankenia* sp. scattered low shrubs; and
15. *Frankenia* species scattered low shrubs.

A number of flora and vegetation survey were conducted over the Cuddingwarra section of application area including a Level 1 flora and vegetation survey conducted by Outback Ecology during November 2011 and two reconnaissance flora and vegetation surveys conducted by Maia during October 2018 and September 2019 (Maia 2019; 2020, Outback Ecology 2012). The following vegetation associations were recorded within the Cuddingwarra section of the application area (Maia, 2020; Westgold Resources, 2020):

Cuddingwarra Area

16. **ATSSL:** Tall sparse shrubland of *Acacia caesaneura* (hybrid) and *Acacia tetragonophylla* with a mixed low sparse shrubland mainly of *Atriplex bunburyana*, *Ptilotus obovatus* and *Senna artemisioides* subsp. *filifolia* with low isolated trees of *Grevillea berryana*. May be associated with drainage lines
17. **MgMaOCSL:** Open chenopod shrubland of *Maireana glomerifolia* and *Maireana atkinsiana* with a mixed sparse low shrubland mainly of *Frankenia setosa*, *Ptilotus beardii* (P3) and *Ptilotus obovatus* and a sparse samphire shrubland of *Tecticornia halocnemoides* subsp. *catenulata* and/or *Tecticornia calytrata*.
18. **MLOCSL:** Mixed low open chenopod shrubland mainly of *Atriplex nana*, *Maireana glomerifolia* and *Maireana pyramidata* with a mixed open shrubland mainly of *Cratystylis subspinescens*, *Atriplex bunburyana* and *Acacia tetragonophylla* with a +/- low sparse samphire shrubland of *Tecticornia calytrata*.
19. **MLSCSL:** Mixed low sparse chenopod shrubland mainly of *Maireana trichoptera*, *Maireana triptera* and *Maireana glomerifolia* with a mixed low sparse shrubland mainly of *Ptilotus obovatus*, *Frankenia setosa* and *Maireana tomentosa* subsp. *tomentosa* and +/- tall isolated shrubs of *Acacia eremaea* and / or *Hakea preissii*.
20. **MOLSL:** Mixed open low shrubland mainly of *Ptilotus obovatus*, *Dodonaea petiolaris* and *Eremophila*

latrobei subsp. *latrobei* with a sparse tall shrubland of *Acacia fuscanaura* and +/- isolated low trees of *Acacia pruinocarpa*.

21. **MOSL**: Mixed open shrubland mainly of *Scaevola spinescens*, *Eremophila glabra* subsp. *tomentosa*, *Rhagodia eremaea* with a mixed low open shrubland mainly of *Atriplex amnicola*, *Cratystylis subspinescens* and *Tecticornia indica* subsp. *bidens*.
22. **TOLSSL**: Open low samphire shrubland of *Tecticornia halocnemoides* subsp. *catenulata*, and *Tecticornia disarticulata* with a sparse shrubland of *Atriplex amnicola*, *Atriplex nummularia* and *Maireana glomerifolia*, and a sparse low shrubland of *Frankenia pauciflora* and *Frankenia setosa*.

* denotes weed species.

Clearing Description	Central Murchison Gold Project Big Bell Gold Operations Pty Ltd proposes to clear up to 319 hectares of native vegetation within a boundary of approximately 5,215 hectares, for the purpose of mineral production and associated activities. The project consists of the Day Dawn, Cuddingwarra and Big Bell project areas located approximately four kilometres south-west, seven and 25 kilometres north-west of Cue respectively.
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 vegetation surveys conducted by Maia (2019; 2020) and Outback Ecology (2012). Clearing is to be conducted across three mining areas (Big Bell, Day Dawn and Cuddingwarra) and 30 tenements. The project includes pit extensions, new pits, expansion to existing waste rock landforms, new waste rock landforms, haul roads, dewatering pipelines, reprocessing of tailings and lay down areas. Clearing permit CPS 8087/1 was granted by the Department of Mines and Petroleum (now the Department of Mines, Industry Regulation and Safety) on 16 August 2018 and was valid from 8 September 2018 to 7 September 2023. The permit authorised the clearing of up to 80 hectares of native vegetation within a boundary of approximately 3,789 hectares, for the purpose of mineral production and associated activities. CPS 8087/1 replaced CPS 5202/3 which was valid from 5 January 2013 to 5 January 2018. The permit authorised the clearing of up to 80 hectares within a boundary of 3,789 hectares, however no clearing was conducted under this permit. On 29 May 2020, the Permit Holder applied to amend CPS 8087/1 to increase the amount of clearing authorised, increase the permit boundary and add tenure to the permit.

3. Assessment of application against Clearing Principles

Comments

The Permit Holder has applied to amend the clearing permit to increase the area of clearing authorised by 239 hectares to approximately 319 hectares, increase the permit boundary by 1,426 hectares to approximately 5,215 hectares and add tenure to the permit. This increase to the clearing area and permit boundary is required for the development and operation of the Cuddingwarra Mining Area to allow new pits, waste rock landform, run of mine pad, haul roads, hardstand areas and other ancillary mining activities. The amendment area exists within the Cuddingwarra mining area, where an additional 10 tenements have been added to the permit boundary. However, the additional clearing will be conducted across all three mining areas.

The vegetation of the amendment area is broadly mapped as Beard vegetation association 18: low woodland; mulga (*Acacia aneura*); and 313: succulent steppe with open scrub; scattered *Acacia sclerosperma* and *Acacia victoriae* over bluebush (GIS Database). Reconnaissance flora and vegetation surveys were conducted over the majority of the amendment area by Maia (2019; 2020) and Outback Ecology (2012) and described the vegetation as being dominated by mixed, *Acacia* and chenopod shrublands. No Threatened Ecological Communities were identified as potentially occurring within the amendment area and none were recorded during the field assessments of the amendment area (GIS Database; Maia, 2019; 2020; Outback Ecology 2012). The amendment area intersects the Austin Land System Priority 3 Ecological Community (PEC), described as saline stony plains with low rises and drainage foci supporting low halophytic shrublands with scattered mulga, with a total mapped area of 15,500 hectares (Curry et al., 1994). The descriptions for six of the seven vegetation types mapped in the amendment area are similar to the descriptions for the Austin Land System land types (MgMaOCSL, MLOCSL, MLSCSL, MOLSL, MOSL, TOLSSL). Although the majority of the amendment area lies within the Austin Land System, the clearing of up to 319 hectares, representing approximately 2.06% of the total area mapped as the Austin Land System, is unlikely to significantly impact the Austin Land System PEC.

Taincrow Calcrete Priority 1 PEC intersects the amendment area (GIS Database). The Taincrow calcrete groundwater assemblage type on Murchison palaeodrainage on Taincrow Station is described as unique assemblages of invertebrates that have been identified in the groundwater calcretes. As this PEC is associated with groundwater calcretes, the clearing of vegetation is unlikely to significantly impact the PEC.

However, as there are several minor ephemeral drainage lines that pass through the amendment area and flood plain areas (GIS Database), potential impacts to vegetation growing in association with watercourses and potential impacts to the PEC as a result of altered hydrology may be minimised by the continued implementation of a watercourse management condition.

A desktop assessment identified 29 conservation significant flora species with the potential to occur within the amendment area; including one Threatened, five Priority 1, two Priority 2, 17 Priority 3 and four Priority 4 species (Maia, 2020). Field surveys of the amendment area recorded six conservation significant flora species; *Acacia speckii* (P4), *Ptilotus beardii* (P3), *Ptilotus luteolus* (P3), *Tecticornia fimbriata* (P3), *Dodonaea amplisemina* (P4) and *Grevillea inconspicua* (P4) (Maia, 2019; 2020; Outback Ecology 2012). None of these species are endemic to the area and all, except *Grevillea inconspicua*, are represented in multiple IBRA regions (Western Australian Herbarium, 1998-). Although *Grevillea inconspicua* is restricted to the Murchison IBRA region, the species range extends over 400 kilometres from east to west (Western Australian Herbarium, 1998-). Potential impacts to conservation significant species are as follows: 29 individuals of *Acacia speckii*, representing 1.27% of the total estimated population; 888 individuals of *Ptilotus beardii*, representing 11.79% of the total estimated population; 97 individuals of *Ptilotus luteolus*, representing 8.09% of the total estimated population; nine individuals of *Tecticornia fimbriata*, representing 0.09% of the total estimated population; 219 individuals of *Dodonaea amplisemina*, representing 1.81% of the total estimated population; and 23 individuals of *Grevillea inconspicua* representing 0.51% of the total estimated population (Maia, 2019; 2020). Although the impact to *Ptilotus beardii* is relatively high, the local significance of the species was rated as low by Maia (2019;2020) as it was found across the majority of vegetation types. Therefore, the species is likely to extend beyond the application area and the actual impact to the species is expected to be much lower than the estimated 11.79%. The proposed clearing is unlikely to significantly impact the conservation status of the conservation significant flora species recorded.

Eremophila rostrata subsp. *rostrata* (T) was not recorded during the field assessments of the amendment area, however a large section of the amendment area was surveyed outside of the flowering period of this species (Outback Ecology 2012; Western Australian Herbarium, 1998-). The species is known to occur on saline quartzite loams on hills and flats, with the majority of the species records being collected on quartz hills (Western Australian Herbarium, 1998-). Potential impacts to *Eremophila rostrata* may be minimised by the implementation of a condition restricting the clearing of the quartz outcrop habitat. However, one outcrop area is not subject to the restricted clearing condition as it can't be avoided due to a planned pit development. This outcrop was visited during the flora survey and no *Eremophila rostrata* individuals were recorded (Maia, 2020).

Five species of weeds; *Cenchrus ciliaris* (Buffel Grass), *Centaureum tenuiflorum* (Slender Centaury), *Citrullus amarus* (Pie Melon), *Cuscuta planiflora* (Small-seeded Dodder) and *Sonchus oleraceus* (Common Sowthistle) were recorded during the field surveys of the amendment area (Maia, 2019; 2020; Outback Ecology 2012). None were listed as a Declared Pest according to the *Biosecurity and Agriculture Management Act 2007*. Weeds have the potential to out-compete native flora and reduce the biodiversity of an area. Potential impacts to biodiversity as a result of the introduction of weeds may be minimised by the implementation of a weed management condition.

Three conservation significant fauna species; the good-legged Lerista (*Lerista eupoda*, P1), malleefowl (*Leipoa ocellata*, T) and western spiny-tailed skink (*Egernia stokesii badia*, T), were identified as possibly occurring in the amendment area due to the presence of potential habitat (Outback Ecology, 2012). A fauna survey of a section of the amendment area recorded no evidence of these species (Outback Ecology, 2012), however potential impacts to threatened fauna species may be reduced by the continued implementation of fauna management conditions.

Fauna habitats have been defined across a portion of the amendment area, with majority of these being widespread throughout the surrounding areas and the Murchison region (Outback Ecology, 2012). However, the quartz outcrop habitat was identified as being relatively uncommon within the broader landscape and being significant for local fauna species as it has the potential to provide refugia for small mammals and reptiles and also provide a vantage point for birds of prey (Outback Ecology, 2012). Potential impacts to fauna may be minimised by the continued implementation of a condition restricting the clearing of the quartz outcrop habitat. However, one outcrop area is not subject to the restricted clearing condition as it can't be avoided due to a planned pit development. The restricted clearing condition will preserve as much of the important habitat as reasonably practicable.

Potential Short Range Endemic (SRE) habitat includes isolated quartz outcrops due to the extent of this habitat being limited and not appearing to be well connected within the wider landscape (Outback Ecology, 2012). Additionally, areas of relatively undisturbed drainage line habitat has the potential to support SREs (Outback Ecology, 2012). Potential impacts to SREs may be minimised by the continued implementation of a condition restricting the clearing of the quartz outcrop habitat and the continued implementation of the watercourse management condition. However, one outcrop area is not subject to the restricted clearing condition as it can't be avoided due to a planned pit development. The restricted clearing condition will preserve as much of the important habitat as reasonably practicable.

Three vegetation types within the amendment area were recorded in association with drainage lines, seasonal wetlands, floodplains, creek banks and minor depressions; ATSSL, MOSL and TOLSSL (Maia, 2020). ATSSL may be associated with drainage lines and was described as being relatively species rich and in Excellent condition (Maia, 2020; Outback Ecology, 2012). This seasonally waterlogged vegetation type is less common in surrounding areas than other vegetation types recorded and may function as refugia for local fauna, as such

is considered to be one of the vegetation types with the highest conservation value (Outback Ecology, 2012). Potential impacts to vegetation and fauna habitat growing in association with watercourses may be minimised by the continued implementation of a watercourse management condition.

The amendment area lies within the Austin, Gabanintha and Mileura land systems (GIS Database). Although the Austin and Gabanintha land systems are not generally susceptible to erosion, the removal of vegetation on drainage tracts of the Austin land system can lead to increased erosion, and some land units within the Mileura land system are moderately to highly susceptible to erosion (Curry et al., 1994). In the areas that may be susceptible to erosion, the potential impacts may be minimised by the continued implementation of a staged clearing condition.

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*. Environmental information has been reviewed, and the assessment of the proposed clearing against the clearing principles remains consistent with the assessment contained in decision report CPS 8087/1.

Methodology Curry et al. (1994)
Maia (2019)
Maia (2020)
Outback Ecology (2012)
Western Australian Herbarium (1998-)

GIS Database:

- DPaW Tenure
- Hydrography, Lakes
- Hydrography, Linear
- IBRA Australia
- Imagery
- Landsystem Rangelands
- Pre-European Vegetation
- Public Drinking Water Source Areas
- Threatened and Priority Ecological Communities boundaries
- Threatened and Priority Ecological Communities buffers
- Threatened and Priority Flora
- Threatened Fauna

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

Comments

There are two native title claims (WC1999/046, WC2004/010) over the area under application (DPLH, 2020). One of these claims has been registered with the National Native Title Tribunal (WC1999/046) and one has been determined by the Federal Court (WC2004/010) on behalf of the claimant groups. 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 two 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.

The amendment application was advertised on 29 June 2020 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. No submissions were received in relation to this application.

Methodology DPLH (2020)

4. References

- Curry, P.J., Payne, A.L., Leighton, K.A., Hennig, P. and Blood, D.A. (1994) An inventory and condition survey of the Murchison River catchment and surrounds, Western Australia. Technical Bulletin No. 84. Department of Agriculture, South Perth, Western Australia.
- DPLH (2020) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <http://maps.daa.wa.gov.au/AHIS/> (Accessed 10 July 2020).
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

- Maia (2019). Big Bell Haul Road Level 1 Reconnaissance and Targeted Flora Survey. Report for Westgold Resources Limited prepared by Maia Environmental Consultants, September, 2019.
- Maia (2020). City of Sydney and Fleece Pool Project Area Reconnaissance and Targeted Flora Survey. Report for Westgold Resources Limited prepared by Maia Environmental Consultancy Pty Ltd, September 2020.
- Outback Ecology (2012) Central Murchison Gold Project Level 1 Vegetation, Flora and Fauna Assessment. Report for Westgold Resources Limited prepared by Outback Ecology Services, 9 July 2012.
- Western Australian Herbarium (1998-) FloraBase - the Western Australian Flora. Department of Biodiversity, Conservation and Attractions. <https://florabase.dpaw.wa.gov.au/> (Accessed 13 July 2020).
- Westgold Resources (2020) Supporting Information provided in regards to Application to Amend CPS 8087/1. Report prepared by Westgold Resources Limited.

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)
DoEE	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 DoEE)
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 DoEE)
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>Environmental 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.