

Clearing Permit Decision Report

Application details
Application actains

1. Application deta	ils					
1.1. Permit applica	ition details					
Permit application No.:	7056/1					
Permit type:	Purpose	Purpose				
1.2. Proponent det	ails					
Proponent's name:	IMD Gold Mines Ltd					
12 Droporty dotai						
1.3. Property detai Property:	Mining Lease 77/166					
Toperty.	Mining Lease 77/1025					
	Mining Lease 77/1044					
	Miscellaneous Licence 77/224					
Local Government Area:	Shire of Yilgarn					
Colloquial name:	Battler Gold Project					
1.4. Application						
Clearing Area (ha)	No. Trees Method of Clearing For the purpose of:					
47.91	Mechanical Removal Mineral production.					
1.5. Decision on a	pplication					
Decision on Permit Appli						
Decision Date:	16 June 2016					
2. Site Information						
2.1. Existing enviro	onment and information					
2.1.1. Description of t Vegetation Description	he native vegetation under application The application area has been mapped as the following Beard vegetation association:					
vegetation Description						
	1068; Medium woodland; salmon gum, morrel, gimlet & <i>Eucalyptus sheathiana</i> .					
	A Level 1 Flora and Vegetation Survey of the application area was undertaken by Western Botanical (2019 during the period 29 September to 1 October and 21 to 23 October 2015. The vegetation survey identified following four vegetation associations in the application area:					
	 Eucalyptus longicornis Dominated Woodland - Eucalyptus longicornis (dominant), E. salubris and E. calycogona subsp. calycogona open woodland from 6 to 15 m over Melaleuca pauperiflora subsp. fastigiata and Santalum apiculatum sparse tall shrubland from 3 to 4 m over Eremophila scoparia, Atriplex vesicaria and A. bunburyana open shrubland from 0.6 to 1.5 m over Maireana georgei, Enchylaena tomentosa and Zygophyllum spp. sparse low shrubland, Eucalyptus salubris Dominated Woodland - Eucalyptus salubris (dominant), E. calycogona subsp. calycogona and E. longicornis open woodland from 6 to 15 m over Exocarpos aphyllus and Atriplex numularia isolated shrubs from 2 to 3 m over A. vesicaria, Ptilotus sp. Goldfields (R. Davis 10796) and Zygophyllum apiculatum (with Acacia erinacea, A. merrallii, A. intricata in southern areas) sparse shrubland, Eucalyptus loxophleba and Acacia acuminata Drainage Shrubland - Emergent Eucalyptus loxophleba subsp. lissophloia (6 to 10 m) over Acacia acuminata (3 to 4 m) tall shrubland over Beyeria sulcata, Alyxia buxifolia, Philotheca brucei open shrubland (2 to 3 m), over a very sparse ground layer of Podolepis lessonii and Trachymene cyanopetala, Mixed Eucalyptus and Acacia acuminata Shrubland - Eucalyptus corrugata, E. yilgarnensis, and E. oleosa subsp. oleosa open woodland (6 to 10 m) over Acacia acuminata (3 to 4 m) tall shrubland over Hybanthus floribundus, Beyeria sulcata, Trymalium myrtillus subsp. myrtillus shrubland (0.6 to 2.5 m) over Lepidosperma aff. fimbriatum (species of interest) sparse sedgeland. 					
Clearing Description	Battler Gold Project IMD Gold Mines Ltd proposes to clear up to 47.91 hectares of native vegetation within a boundary of approximately 61.50 hectares for the purposes of mineral production. The project is located 14 kilometres south- southeast of Southern Cross in the Shire of Yilgarn.					
Vegetation Condition	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994);					
	to					
	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).					
Comment	The application area has been extensively disturbed due to historical gold prospecting, exploration, minin ore processing (Bioscope Environmental Consulting Pty Ltd) (Bioscope) (2016). The application area cor					
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access tracks, old mine shafts, a pit, stockpiles and a leach pad. Approximately 9.44 hectares of the application area is considered to be disturbed from previous exploration and mining activities (Bioscope, 2016). Rehabilitation and closure works will be conducted following the end of mining activities and will include closure of old mine shafts, pit and stockpiles to current closure standards (Bioscope, 2016).

B. Assessment of application against clearing principles

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

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

The application area is located within the Southern Cross sub-region of the Coolgardie Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). The Southern Cross subregion is characterised by subdued relief and consists of gently undulating uplands, dissected by broad valleys with bands of low greenstone hills (CALM, 2002). Diverse *Eucalyptus* woodlands (*Eucalyptus salmonophloia, E. salubris, E transcontinentalis, E. longicornis*) rich in endemic eucalypts occur around salt lakes, on the low greenstone hills, valley alluvials and broad plains of calcareous earths (CALM, 2002).

The application area has been disturbed by historic gold prospecting, exploration, mining and ore processing (Bioscope, 2016). Approximately 9.44 hectares of the application area consists of previously disturbed and cleared areas (Bioscope, 2016). Undisturbed areas within the application area were considered to be in very good to good condition according to Keighery (1994) (Bioscope, 2016).

The flora and vegetation survey undertaken by Western Botanical (2015), identified no Threatened Ecological Communities (TEC's) and no Priority Ecological Communities (PEC's) occurring within the application area. The flora and vegetation survey identified four vegetation associations within the application area (Western Botanical, 2015). The majority of the vegetation recorded from the application area was *Eucalyptus longicomis* dominated woodland (Western Botanical, 2015). A total of 140 flora species (including 16 introduced species) from 92 genera and 36 families were recorded during the flora survey (Western Botanical, 2015). Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

No species of Threatened flora were recorded during the flora survey (Western Botanical, 2015). However, the flora survey recorded three Priority flora species within the application area (Western Botanical, 2015). These Priority flora species include; *Hydrocotyle corynophora* (P1), *Gnephosis intonsa* (P3) and *Phlegmatospermum eremaeum* (P3) (Western Botanical, 2015). There was one population of *H. corynophora* (containing 115 individuals) recorded within the application area (Western Botanical, 2015). The potential clearing impacts to the *H. corynophora* population are considered significant due to the limited records of this species. *H. corynophora* is previously known from one other location (Western Botanical, 2015). The records of *H. corynophora* within the application area and south of the application area are the only other known records of this species (Western Botanical, 2015). Western Botanical (2015) recorded 2,000 *H. corynophora* individuals in adjacent areas located south of the application area. IMD Gold Mines Ltd has committed to avoiding clearing within 50 metres of these individuals (Bioscope, 2016). Potential impacts to *H. corynophora* may be minimised by the implementation of a flora management condition.

Approximately 4,325 individuals (7.93% of the total number of plants recorded during the survey) of *G. intonsa* and approximately 44 individuals of *P. eremaeum* (100% of the total number of plants recorded during the survey) will be cleared within the application area. *G. intonsa* is found to be widespread and very abundant within wet depressions of the '*Eucalyptus salubris* Dominated Woodland' vegetation association, both within the application and surrounding areas (Western Botanical, 2015). *P. eremaeum* is widely but sparsely distributed across semi-arid areas of Western Australia with records from Bruce Rock through to the Nullabor (DPaW, 2016). Given its wide distribution, it is unlikely that the proposed clearing will have a significant impact on *P. eremaeum*.

Another flora species *Lepidosperma* aff. *fimbriatum* was of interest due to the species's unresolved taxonomy. This taxa was also considered to be present in large numbers in the local area (Western Botanical, 2015). Bioscope (2016) reported clearing of *L*. aff. *fimbriatum* individuals would also be limited, where possible. Approximately 17 individuals from a total number of 1,618 individuals recorded as part of the flora survey of *L*. aff. *fimbriatum* will be cleared within the application area (Western Botanical, 2015). Impacts to conservation significant flora as a result of the clearing may be avoided by implementing a flora management condition.

A desktop fauna survey identified 204 fauna species potentially occurring within a 25 kilometre radius of the application area (Terrestrial Ecosystems, 2016). The fauna database search revealed records of seven amphibian, 69 reptile, 99 bird and 29 mammal species potentially occurring within the application area and surrounding area (Terrestrial Ecosystems, 2016). Terrestrial Ecosystems (2016) report fauna habitat areas that have been previously cleared or disturbed following mining activities have little ecological value. The undisturbed fauna habitat of the application area is also plentiful in adjacent areas (Terrestrial Ecosystems, 2016). For this reason, the habitat present in the application area is not likely to support a high level of fauna diversity.

Vegetation of the application area has been previously disturbed and the vegetation proposed to be cleared is well represented in the surrounding area (Government of Western Australia, 2014; GIS Database). It is unlikely the proposal will result in the clearing of native vegetation that has high biodiversity values.

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

Methodology Bioscope (2016) CALM (2002) DPaW (2016) Terrestrial Ecosystems (2016) Western Botanical (2015)

GIS Database:

- Pre-European Vegetation
- Threatened Fauna
- Threatened and Priority Flora
- TEC/PEC Boundaries
- TEC/PEC Buffer

(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

A Level 1 fauna survey of the application and surrounding areas was undertaken by Terrestrial Ecosystems (2016). Fauna habitats within the application area varied from mostly flat to gently undulating areas. Some areas also contained ground leaf litter and in other areas the ground was mostly bare (Terrestrial Ecosystems, 2016). The majority of the fauna habitat was recorded as tall, open Eucalypt woodland over an understorey of chenopod shrubs (Terrestrial Ecosystems, 2016). Other areas were previously cleared of vegetation or disturbed by mining activities (Terrestrial Ecosystems, 2016).

There are no known records of Threatened fauna within the application area (GIS Database). The desktop survey identified 204 fauna species potentially occurring within a 25 kilometre radius of the application area (Terrestrial Ecosystems, 2016). Terrestrial Ecosystems (2016) reported 13 conservation significant fauna species which have the potential to occur within the application area. Of these conservation significant species, the Western Rosella (*Platycerus icterotis xanthogenus* – Priority 4), Peregrine Falcon (*Falco peregrinus* - Other Specially Protected) and the Chuditch (*Dasyurus geoffroii* – Threatened) may occur in the application area or surrounding area (Terrestrial Ecosystems, 2016). Terrestrial Ecosystems (2016) reported Western Rosella and the Peregrine Falcon may infrequently occur in the vicinity of the application area. These two bird species are also highly mobile and able to utilise adjacent habitat areas.

Terrestrial Ecosystems (2016) reported a very low probability that Chuditch individuals would occur within the application area. Chuditch prefer moist, densely vegetated, steeply sloping forest (especially Jarrah forest) or open, gently sloping forest with dense undergrowth (DotE, 2016). The application area contains cleared vegetation, has been subjected to previous disturbance and does not contain habitat suitable for Chuditch individuals. Chuditch are also highly mobile and given the relatively small disturbance area, Chuditch individuals would move to adjacent areas in the event of disturbance (Terrestrial Ecosystems, 2015). The application area is not considered to be significant habitat for Chuditch. The desktop survey also reported a low probability of conservation significant species being present in the application area as the habitat is not preferred by fauna species and large areas of suitable habitat in good condition are located nearby (Terrestrial Ecosystems, 2016).

The application area contains previously cleared vegetation and areas disturbed by mining activities which do not contain valuable fauna habitat. The area proposed to be cleared does not contain habitat critical for fauna species and the proposed clearing will not impact significant fauna habitat.

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

Methodology DotE (2016) Terrestrial Ecosystems (2016)

> GIS Database: - 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

A search of available databases was undertaken and no Threatened flora have been recorded in the application area (GIS Database). A flora survey was also undertaken by Western Botanical (2015) which did not record species of Threatened flora in the application area. The native vegetation proposed to be cleared is not likely to contain or is not necessary for the continued existence of rare flora.

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

Methodology Western Botanical (2015)

GIS Database: - 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

According to available databases, there are no Threatened Ecological Communities (TEC's) occurring within or near the application area (GIS Database). Bioscope (2016) reported no vegetation communities considered to be a TEC within or near the application area.

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

Methodology Bioscope (2016)

GIS Database:

- TEC/PEC – Boundaries

- TEC/PEC - 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 Interim Biogeographic Regionalisation of Australia (IBRA) bioregion in which approximately 97.96% of the pre-European vegetation remains in Western Australia (refer to table below) (Government of Western Australia, 2014; GIS Database).

The native vegetation located in the application area has been mapped as Beard vegetation association 1068; Medium woodland; salmon gum, morrel, gimlet and *Eucalyptus sheathiana* (GIS Database). This vegetation association has not been extensively cleared as over 52% remains at both State and bioregional levels (refer to table) (Government of Western Australia, 2014). Vegetation association 1068 has not been extensively cleared in the Coolgardie bioregion and the vegetation conservation status is considered to be of 'least concern' (Department of Natural Resources and Environment, 2002). The area proposed to be cleared is not considered to be significant as a remnant in an area that has been extensively cleared (GIS Database).

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in All DPaW Managed Land
IBRA Bioregion – Coolgardie	12,912,204	12,648,491	~97.96	Least Concern	15.89
Beard veg assoc. – State					
1068	268,899	142,087	~52.84	Least Concern	6.24
Beard veg assoc. – Bioregion					
1068	193,988	104,804	~54.03	Least Concern	7.31

* Government of Western Australia (2014).

** 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 (2014)

GIS Database:

- IBRA WA (Regions - Sub Regions)

- 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 likely to be at variance to this Principle

There are no permanent watercourses or water bodies mapped within the application area (GIS Database). One minor, ephemeral watercourse is located in the south-west portion of the application area (GIS Database). Bioscope (2016) reported no riparian or wetland dependant vegetation or watercourses in the application area. No vegetation is growing in, or in association with an environment associated with a watercourse.

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

GIS Database:

- 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

Northcote, et al. (1960-68) describe soils in the application area as brown and grey-brown calcareous earths, with some soils containing ironstone gravel on undulating plains with some low dunes, seasonal lakes and clay pans (GIS Database). Bioscope (2016) describes soils of the application area as dark yellowish-brown to dark reddish brown, alkaline earthy sands and gravels. These soils do not readily erode but may be subjected to minor wind erosion once vegetation has been cleared. Localised surface water run-off may occur following heavy rainfall events and if surface water drainage on-site is not managed. It is unlikely the proposal will change soil salinity levels or impact on-site or off-site nutrient export.

Parts of the application area have been cleared of native vegetation for past mining activities. It is unlikely that the relatively small amount of clearing required for the proposal (47.91 hectares) within a 61.51 hectare boundary area will cause appreciable land degradation.

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

Methodology Bioscope (2016) Northcote, et al. (1960-68)

> GIS Database: - Hydrography, linear

(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 at variance to this Principle

The application area does not lie within any conservation areas or Department of Parks and Wildlife managed lands (Bioscope, 2016; GIS Database). The nearest conservation area is the Wockallarry Nature Reserve ('Class A' Reserve) which is located approximately 15 kilometres south-west of the application area (GIS Database). As this conservation area is located a considerable distance from the application area, the proposed clearing is not likely to have any impacts on the environmental values of this or any other conservation area.

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

Methodology Bioscope (2016)

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

No Public Drinking Water Source Areas (PDWSA's) are located within or in the vicinity of the application area (GIS Database). There are no permanent watercourses or wetlands located within the application area (Bioscope, 2016; GIS Database). Therefore, the clearing of native vegetation required for the proposal will not cause deterioration in the quality of surface water, including sedimentation, erosion, turbidity or eutrophication of water bodies on-site or off-site of the application area.

The groundwater within the application area is between 14,000 – 35,000 milligrams per litre of Total Dissolved Solids (TDS) (GIS Database). It is not expected that the proposed clearing of 47.91 hectares within a permit boundary of 61.50 hectares would adversely alter groundwater salinity levels within the application or surrounding area. The proposed clearing is not likely to have an impact on the quality of groundwater either onsite or off-site of the application area.

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

Methodology Bioscope (2016)

GIS Database:

- Groundwater Salinity, Statewide
- 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 mean annual rainfall recorded at the nearest weather station located at Southern Cross Airfield (approximately 15 kilometres north of the application area) is 305.5 millimetres (BoM, 2016). Total average annual evaporation for the area is 2,800 millimetres (BoM, 2016). For this reason, there is likely to be little surface flow during normal seasonal rains. It is unlikely that the proposed clearing will cause or exacerbate the incidence or intensity of flooding.

The soils of the application area are not subject to waterlogging during normal seasonal rainfall (Northcote, et al. 1960-68; GIS Database). The application area receives low annual rainfall and high average annual evaporation (BoM, 2016). For these reasons, the relatively small amount of native vegetation clearing is unlikely to increase flooding of the application area. The surrounding area is also reasonably well vegetated further reducing the likelihood of or intensity of flooding (GIS Database).

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

Methodology BoM (2016) Northcote, et al. (1960-68)

> GIS Database: - Hydrography, linear

Planning instrument, Native Title, Previous EPA decision or other matter.

Comments There are no Native Title claims over the area under application (DAA, 2016). 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 (DAA, 2016). 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 Environment Regulation, Department of Parks and Wildlife and the Department of Water 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 clearing permit application was advertised on 23 May 2016 by the Department of Mines and Petroleum inviting submissions from the public. There were no submissions received.

Methodology DAA (2016)

4. References

Bioscope (2016) Battler Gold Project, Native Vegetation Clearing Permit Supporting Document. Report prepared for IMD Gold Mines by Bioscope Environmental Consulting Pty Ltd, Perth, Western Australia, May 2016.

- BoM (2016) Bureau of Meteorology Website Climate Data Online, Southern Cross Airfield. Bureau of Meteorology. http://www.bom.gov.au/climate/data/index.shtml. (Accessed 1 June 2016).
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Coolgardie (COO2 Southern Cross subregion) Department of Conservation and Land Management, Perth, Western Australia.
- DAA (2016) Aboriginal Heritage Inquiry System. Department of Aboriginal Affairs. http://maps.dia.wa.gov.au/AHIS2 (Accessed 1 June 2016).
- DotE (2016) Dasyurus geoffroii in Species Profile and Threats Database. Department of the Environment. http://www.environment.gov.au/sprat. Department of the Environment, Canberra. (Accessed 9 June 2016).
- 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.
- DPaW (2016) Florabase the Western Australian Flora. Flora Species Search, Department of Parks and Wildlife, Western Australian Herbarium. https://florabase.dpaw.wa.gov.au/ (Accessed 15 June 2016).
- Government of Western Australia (2014) 2014 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Western Australian Department of Parks and Wildlife, Perth, Western Australia.
- Keighery B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of Western Australia (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.
- Terrestrial Ecosystems (2016) Level 1 Fauna Risk Assessment for the Battler Project Area. Report prepared for Bioscope Environmental Pty Ltd, by Terrestrial Ecosystems, Perth, Western Australia, April 2016.

Western Botanical (2015) Level 1 Flora Assessment and Targeted Searches, Flora Survey of Battler Tenements M77/166 &

P77/3645. Report prepared for IMD Gold Ltd/Bioscope Environmental, by Western Botanical, Perth, Western Australia, November, 2015.

5. Glossary

<u>Acronyms:</u>

ВоМ	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia
DAFWA	Department of Agriculture and Food, Western Australia
DEC	Department of Environment and Conservation, Western Australia (now DPaW and DER)
DER	Department of Environment Regulation, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DRF	Declared Rare Flora
DotE	Department of the Environment, Australian Government
DoW	Department of Water, Western Australia
DPaW	Department of Parks and Wildlife, Western Australia
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities (now DotE)
EPA	Environmental Protection Authority, Western Australia
EP Act	Environmental Protection Act 1986, Western Australia
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (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	Rights in Water and Irrigation Act 1914, Western Australia
TEC	Threatened Ecological Community

Definitions:

т

{DPaW (2015) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

Threatened species:

Published as Specially Protected under the *Wildlife Conservation Act 1950*, listed under Schedules 1 to 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).

Threatened fauna is that subset of 'Specially Protected Fauna' declared to be 'likely to become extinct' pursuant to section 14(4) of the Wildlife Conservation Act.

Threatened flora is flora that has been declared to be 'likely to become extinct or is rare, or otherwise in need of special protection', pursuant to section 23F(2) of the Wildlife Conservation Act.

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. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

EN Endangered species

Threatened species considered to be facing a very high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

VU Vulnerable species

Threatened species considered to be facing a high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

EX Presumed extinct species

Species which have been adequately searched for and there is no reasonable doubt that the last individual has died. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora.

Migratory birds protected under an international agreement

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 the Bonn Convention, relating to the protection of migratory birds. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice.

CD Conservation dependent fauna

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice.

OS Other specially protected fauna

Fauna otherwise in need of special protection to ensure their conservation. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice.

P Priority species

IA

Species which are poorly known; or

Species that are adequately known, are rare but not threatened, and 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.