



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 7428/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Mt Morgans WA Mining Pty Ltd

1.3. Property details

Property: Mining Lease 39/1107
Local Government Area: Shire of Laverton
Colloquial name: Mt Morgans Gold project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
63		Mechanical Removal	Mining related infrastructure

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 2 March 2017

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description The clearing permit application area has been broadly mapped as the following Beard vegetation associations (GIS Database):
39: Shrublands; mulga scrub; and
389: Succulent steppe with open low woodland; mulga over saltbush.
The majority of the application area is mapped as Beard vegetation association 39, with only a very small section on the eastern side mapped as Beard vegetation association 389 (GIS Database).

A flora and vegetation survey was conducted by Native Vegetation Solutions in March 2016 over the application areas and surrounding areas covering a total area of approximately 4,641 hectares (Native Vegetation Solutions, 2016).

The following vegetation communities were recorded within the application area (Native Vegetation Solutions, 2016):

Rehabilitation Vegetation - *Acacia aneura*, *A. mulganeura*, *Eucalyptus clendii*, *E. Campaspe*, *E. torquata*, *Maireana pyramidata*, *Atriplex vesicaria* and *Senna artemisioides* subsp. *filifolia*;

Tecticornia shrubland - *Tecticornia species*, *Maireana glomerifolia*, *Sclerolaena cuneata*, *Atriplex vesicaria*, *Melaleuca interioris* and *Casuarina obesa*;

Acacia shrubland on emergent hills - *Acacia aneura*, *A. pteraneura*, *A. grasbyi*, *A. tetragonophylla*, *Cratystylis subspinescens*, *Scaevola spinescens*, *Senna cardiosperma*, *Maireana sedifolia*, and *Eremophila oppositifolia* subsp. *angustifolia*;

Acacia over Chenopod shrubland - *Acacia aneura*, *A. mulganeura*, *A. pteraneura*, *Maireana pyramidata*, *Sclerolaena diacantha*, *Tecticornia indica* subsp. *bidens*, *T. peltata*, *T. undulata*, *Cratystylis subspinescens*, *Atriplex vesicaria* and *Atriplex bunburyana*;

Acacia mulganeura over Eremophila forrestii and grasslands - *Acacia mulganeura*, *A. caesaneura*, *A. aneura*, *A. craspedocarpa*, *Eremophila forrestii* subsp. *forrestii*, *Scaevola spinescens*, *Eragrostis eriopoda*, *Eremophila platythamnus* subsp. *exotrachys*, *Crenidium spinescens* and *Triodia basedowii*.

Acacia aneura creekline vegetation - *Acacia aneura*, *Acacia caesaneura*, *Acacia mulganeura*, *Acacia tetragonophylla*, *Eremophila oppositifolia* subsp. *angustifolia*, *Scaevola spinescens*, *Ptilotus obovatus*, *Senna artemisioides* subsp. *sturtii*, *Lepidium platypetalum*, and *Spartothamnella teucriflora*;

Acacia shrublands on undulating hills - *Acacia resinimarginea*, *Acacia aneura*, *Calytrix erosipetala*, *Eremophila georgei*, *Eremophila forrestii* subsp. *forrestii*, *Dodonaea rigida*, *Chrysocephalum puteale*, *Eremophila latrobei* subsp. *filiformis* and *Senna artemisioides* subsp. *helmsii*;

Bare Salt Lakes - no vegetation.

Clearing Description	Mt Morgans Gold Project. Mt Morgans WA Mining Pty Ltd proposes to clear up to 63 hectares of native vegetation within a boundary of approximately 253 hectares, for the purposes of mining-related infrastructure. The project is located approximately 30 kilometres southwest of Laverton, within the Shire of Laverton.
Vegetation Condition	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994); To Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).
Comment	The vegetation condition was derived from a vegetation survey conducted by Native Vegetation Solutions (2016). The proposed clearing is for mining related infrastructure including borrow pits, a workshop, laydown area and access roads (Dacian Gold, 2016).

3. Assessment of application against Clearing Principles

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

Comments	<p>Proposal is not likely to be at variance to this Principle</p> <p>The application area is located within the Eastern Murchison subregion of the Murchison Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). The Eastern Murchison subregion is characterised by broad plains of red-brown soils and breakaway complexes as well as red sandplains. The vegetation of this subregion is dominated by Mulga Woodlands often rich in ephemerals; hummock grasslands, saltbush shrublands and Halosarcia shrublands (CALM, 2002). The Eastern Murchison subregion supports a rich and diverse flora and fauna, however most species are wide ranging and not restricted to the subregion (CALM, 2002).</p> <p>Flora and vegetation surveys were conducted by Native Vegetation Solutions in March 2016 over the application area and surrounding areas (Native Vegetation Solutions, 2016). A total of 195 flora taxa were recorded during the survey, representing 32 families and 77 Genera (Native Vegetation Solutions, 2016).</p> <p>No Threatened Ecological Communities have been recorded within or in close proximity to the application area, and none were found during the survey (Native Vegetation Solutions, 2016; GIS Database). A Priority Ecological Community (PEC) is mapped as occurring approximately one kilometre to the north-east of the application area, at its nearest point (GIS Database). This PEC, "Mount Morgan calcrete groundwater assemblage type on Carey palaeodrainage on Mt Weld Station" is mapped over a total area of approximately 2,779 hectares, and the proposed clearing is unlikely to have any impact on the PEC.</p> <p>A desktop survey identified one Threatened flora species and forty one Priority flora species with the potential to occur within the survey area, based on known distributions and habitat preferences (Native Vegetation Solutions, 2016). However, none were recorded during the flora survey (Native Vegetation Solutions, 2016).</p> <p>The vegetation condition within the application area ranged from Good to Very Good with parts of the survey area previously disturbed by access tracks, historical mining and mineral exploration activities (Native Vegetation Solutions, 2016).</p> <p>Eight weed species were recorded during the flora surveys one of which (Common Prickly Pear) is a declared plant under the <i>Biosecurity and Agriculture Management Act 2007</i>. 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 proposed clearing may be minimised by the implementation of a weed management condition.</p> <p>A Level 1 fauna survey was conducted over the application area and adjacent areas by Western Wildlife in March 2016 comprising of a desktop review and a five day reconnaissance field survey (Western Wildlife, 2016). The desktop survey identified 279 native fauna species with the potential to occur within the broader survey area, including 10 frogs, 82 reptiles, 141 birds and 32 mammal species. The field survey recorded a total of 80 native fauna species and six introduced fauna species (Western Wildlife, 2016). Western Wildlife (2016) reported that the fauna assemblage within the survey area was typical of the region.</p> <p>The desktop survey identified 17 fauna species (mostly birds) of conservation significance, with the potential to occur within the survey area based on known distributions (Western Wildlife, 2016). Of these, the following three species were recorded during the fauna survey: Rainbow Bee-eater, <i>Merops ornatus</i>; Common Greenshank, <i>Tringa nebularia</i>; and Red-necked Stint, <i>Calidris ruficollis</i> (Western Wildlife, 2016), all of which are wide ranging migratory bird species.</p> <p>The Murchison Bioregion remains largely uncleared (Government of Western Australia, 2015), and the landforms, vegetation associations and fauna habitat types found within the application area are well represented within the region (Native Vegetation Solutions, 2016; Western Wildlife, 2016; GIS Database). The application area is unlikely to represent an area of higher biodiversity than surrounding areas, in either a local or regional context.</p>
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Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology CALM (2002)
Government of Western Australia (2015)
Native Vegetation Solutions (2016)
Western Wildlife (2016)

GIS Database:
- IBRA Australia
- Pre-European Vegetation
- Threatened and Priority Flora
- Threatened Ecological Sites Buffered

(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 and habitat survey was conducted over the application area and surrounding areas in March 2016 (Western Wildlife, 2016). The survey comprised a desktop search of relevant fauna databases and a field reconnaissance survey.

Western Wildlife (2016) identified the following seven main fauna habitat types within the application area:

1. Acacia shrublands on undulating hills;
2. *Acacia aneura* creekline vegetation;
3. *Acacia mulganeura* over *Eremophila forrestii*;
4. Acacia over Chenopod shrublands;
5. Bare salt lake;
6. Acacia shrubland on emergent hills; and
7. Tecticornia shrublands.

None of these habitat types are restricted to either the clearing permit application area or the broader survey area (Western Wildlife, 2016).

Opportunistic fauna observations, and a series of transects were conducted throughout the survey area, representing all the main habitat types. Targeted searches for conservation significant fauna were also conducted, by traversing areas of suitable habitat.

Three migratory bird species of conservation significance were recorded during the survey: Rainbow Bee-eater, *Merops ornatus*; Common Greenshank, *Tringa nebularia*; and Red-necked Stint, *Calidris ruficollis*. Western Wildlife (2016) considered that several fauna species of conservation significance (mostly birds) had the potential to occur within the broader survey area. However, the majority of these species are highly mobile and all have wide distributions, and they are unlikely to be specifically dependant on the habitats within the application area (Western Wildlife, 2016).

The majority of fauna habitats found within the application area are relatively common and widespread in the region (Western Wildlife, 2016; GIS Database). Western Wildlife (2016) concluded that potential impacts to fauna are generally likely to be minor, and although some restricted fauna habitats may be considered locally significant, the vegetation proposed to be cleared is unlikely to represent significant habitat for fauna in a regional context.

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

Methodology Western Wildlife (2016)

GIS Database:
- Imagery
- Pre-European Vegetation

(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 flora survey which included the application area did not record any species of Threatened flora (Native Vegetation Solutions, 2016). The vegetation associations recorded within the application area are well represented in surrounding areas (Native Vegetation Solutions, 2016; 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 Native Vegetation Solutions (2016)

GIS Database:
- Threatened and Priority Flora
- Pre-European Vegetation

(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).

Surveys of the application area did not identify any TECs (Native Vegetation Solutions, 2016).

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

Methodology Native Vegetation Solutions (2016)

GIS Database:
- Threatened Ecological Sites Buffered

(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 area applied to be cleared is located within the Murchison IBRA bioregion (GIS Database). There is approximately 99% of pre-European vegetation remaining within the bioregion (Government of Western Australia, 2015).

The application area is broadly mapped as Beard vegetation associations: 39: Shrublands; mulga scrub; and 389: Succulent steppe with open low woodland; mulga over saltbush (GIS Database). Approximately 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, 2015). Hence, the vegetation proposed to be cleared does not represent a significant remnant of vegetation in an area that has been extensively cleared.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in DPaW managed lands
IBRA Bioregion - Murchison	28,120,586	28,044,823	~ 99	Least Concern	7.78
Beard vegetation association - State					
39	6,613,569	6,602,580	~ 99	Least Concern	12.02
389	642,356	640,468	~ 99	Least Concern	3.57
Beard vegetation association - Bioregion					
39	1,148,400	1,138,064	~ 99	Least Concern	3.56
389	493,977	492,089	~ 99	Least Concern	4.65

* Government of Western Australia (2015)

** 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 (2015)

GIS Database:
- IBRA Australia
- Pre-European Vegetation

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Comments Proposal is at variance to this Principle

There are no permanent watercourses or wetlands within or in close proximity to the application area (GIS Database).

A small section on the eastern edge of the application area intersects with the edge of Lake Carey, at the northern tip of the lake. Lake Carey is a large salt lake approx 90 kilometres long, and is part of a larger chain of salt lakes (GIS Database). Lake Carey is dry for most of the year, only filling briefly following significant rainfall events (Dacian Gold, 2016).

Several minor ephemeral drainage lines pass through the application area (GIS Database). Minor drainage lines in the area drain towards Lake Carey and only flow briefly, immediately following significant rainfall (CALM, 2002). One of the vegetation associations recorded within the application area, "Tecticornia shrubland", is considered to be riparian vegetation (Native Vegetation Solutions, 2016). This vegetation association is widespread and abundant outside of the application area (Native Vegetation Solutions, 2016). Due to the size of the lake and the abundance of ephemeral drainage channels in the region, the proposed clearing is unlikely to have any significant impact on vegetation associated with water courses or wetlands, including Lake Carey.

Based on the above, the proposed clearing is at variance to this Principle. Management practices will be implemented to minimise potential impacts to Lake Carey (Dacian Gold, 2016).

Methodology Dacian Gold (2016)

GIS Database:

- Hydrography, Lakes
- Hydrography, linear

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments Proposal may be at variance to this Principle

The application area falls within the Carnegie, Hootanui, Leonora and Yilgangi land systems (GIS Database). These land systems have been mapped and described in technical bulletins produced by the former Department of Agriculture (now the Department of Agriculture and Food).

The Carnegie land system consists of salt lakes with fringing saline flats and dunes (Pringle et. al., 1994). This land system is generally not susceptible to soil erosion (Pringle et. al., 1994).

The Hootanui land system is described as breakaways, hills and ridges with extensive saline gravelly and stony lower plains, supporting scattered halophytic shrublands (Pringle et. al., 1994). The gravelly mantles generally protect this land system from erosion, however, drainage tracts and breakaway footslopes may be susceptible to water erosion if the vegetation cover is removed (Pringle et. al., 1994).

The Leonora land system consists of greenstone hills and stony plains, supporting mixed stony chenopod shrublands (Pringle et. al., 1994). This land system may be subject to erosion if the protective stony mantles are disturbed, and drainage tracts are particularly susceptible to water erosion if the soil surface is disturbed or vegetation cover is removed (Pringle et. al., 1994).

The Yilgangi land system is described as low breakaways with saline, gravelly lower plains, supporting halophytic low shrublands (Pringle et. al., 1994). This land system is susceptible to water if the vegetation cover is removed (Pringle et. al., 1994).

Based on the above, the proposed clearing may be at variance to this Principle. Potential land degradation as a result of the proposed clearing may be minimised by the implementation of a staged clearing condition.

Methodology Pringle et. al. (1994)

GIS Database:

- Rangeland Land System Mapping

(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

The nearest conservation area is a small unnamed Nature Reserve, which is located approximately 97 kilometres southwest of the application area (GIS Database). The proposed clearing is unlikely to have any impacts on the environmental values of this or any other 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). The groundwater in the area is hypersaline, and the proposed clearing is unlikely to cause any further deterioration in the groundwater quality (Dacian Gold, 2016).

There are no permanent watercourses or wetlands within the application area (GIS Database). Part of the application area intersects with the edge of Lake Carey, a large ephemeral salt lake system (GIS Database). Minor saline drainage lines are abundant in the area and drain towards Lake Carey. However, they are dry for most of the year, only flowing briefly immediately following significant rainfall (CALM, 2002). The proposed clearing is unlikely to result in increased sedimentation of any watercourse, or cause deterioration in the quality of surface water.

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

Methodology CALM (2002)
Dacian Gold (2016)

GIS Database:
- Hydrography, Linear
- Public Drinking Water Source Areas

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

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

The climate of the region is semi-arid, with a low average rainfall of approximately 200 millimetres per year (CALM, 2002). Drainage lines in the area are dry for most of the year, only flowing briefly immediately following significant rainfall (CALM, 2002).

There are no permanent water courses or waterbodies within the application area (GIS Database). Several minor ephemeral drainage lines pass through the application area and a small part of the application area intersects with the edge of Lake Carey, a large ephemeral salt lake system (GIS Database). Temporary localised flooding may occur during heavy rainfall events. However, the proposed clearing is unlikely to increase the incidence or intensity of natural flooding events.

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

Methodology CALM (2002)

GIS Database:
- Hydrography, linear

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

Comments

The clearing permit application was advertised on 23 January 2017 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received in relation to this application.

Two registered Aboriginal Sites of Significance are located within or in close proximity to the application area (DAA, 2017). 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.

There are no native title claims over the area under application (DAA, 2017). 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*.

It is the proponent's responsibility to liaise with the Department of Environment Regulation, the Department of Water, and the Department of Parks and Wildlife, 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 DAA (2017)

4. References

- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- DAA (2017) Aboriginal Heritage Enquiry System. Department of Aboriginal Affairs. <http://maps.dia.wa.gov.au/AHIS2/> (Accessed 24 February 2017).
- Dacian Gold (2016) Purpose Permit Application. Assessment of Clearing Principles. Mt Morgans Gold Project. Clearing on M39/1107. Dacian Gold Limited, December 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.
- Government of Western Australia (2015) 2015 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2015. WA Department of Parks and Wildlife, Perth.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Native Vegetation Solutions (2016) Level 1 Flora and Vegetation Survey Dacian Gold Ltd Mt Morgans Gold Project. Report prepared for Dacian Gold Limited, by Native Vegetation Solutions, July 2016.
- Pringle, H.J.R., Van Vreeswyk, A.M.E., and Gilligan, S.A. (1994) An Inventory and Condition Survey of the north-eastern Goldfields, Western Australia. Department of Agriculture, Western Australia.
- Western Wildlife (2016) Dacian Gold Limited: Mt Morgans Gold Project. Report prepared for Dacian Gold Limited, by Western Wildlife, July 2016.

5. Glossary

Acronyms:

BoM	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)
DEE	Department of the Environment and Energy, Australian Government
DER	Department of Environment Regulation, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DRF	Declared Rare Flora
DoE	Department of the Environment, Australian Government (now DEE)
DoW	Department of Water, Western Australia
DPaW	Department of Parks and Wildlife, Western Australia
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities (now DEE)
EPA	Environmental Protection Authority, Western Australia
EP Act	<i>Environmental Protection Act 1986</i> , Western Australia
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Federal Act)
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
PEC	Priority Ecological Community, Western Australia
RIWI Act	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
TEC	Threatened Ecological Community

Definitions:

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

T

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.
- IA 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**
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.