



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 7192/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Big Bell Gold Operations Pty Ltd

1.3. Property details

Property: Mining Lease 20/70
Mining Lease 20/71
Mining Lease 20/249
Local Government Area: Shire of Cue

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
278.91		Mechanical Removal	Mineral production

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 22 September 2016

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description Beard vegetation associations have been mapped for the whole of Western Australia. Two Beard vegetation association are located within the application area (GIS Database):

Beard vegetation association 18: Low woodland; mulga (*Acacia aneura*)

Beard vegetation association 39: Shrublands; mulga scrub

*Note: Less than 1% of the clearing permit boundary is mapped as Beard vegetation association 39.

MWH (2016) conducted a flora and vegetation survey over the areas to be disturbed within the clearing permit boundary area and identified 13 vegetation types:

- *Acacia incurvaneura*, *Acacia ramulosa* var. *linophylla* and *Acacia pruinocarpa* tall sparse shrubland, over *Eremophila forrestii* subsp. *forrestii* and *Eremophila galeata* mid sparse shrubland, over *Ptilotus obovatus* low scattered shrubs with *Eragrostis eriopoda* low scattered tussock grasses;
- *Acacia pteraneura*, *Acacia craspedocarpa* x (hybrid) and *Acacia tetragonophylla* tall sparse shrubland, over *Eremophila galeata*, *Eremophila glutinosa* and *Eremophila forrestii* subsp. *forrestii* mid sparse shrubland, and *Ptilotus obovatus* low scattered shrubs;
- *Acacia aneura*, *Acacia pteraneura* and *Acacia fuscaneura* tall sparse shrubland, over *Acacia craspedocarpa* and *Acacia tetragonophylla* mid sparse shrubland, over *Eremophila forrestii* subsp. *forrestii* and *Ptilotus obovatus* low scattered shrubs;
- *Acacia pteraneura* tall sparse shrubland, over *Acacia tetragonophylla*, *Acacia craspedocarpa* x (hybrid) and *Acacia craspedocarpa* mid sparse shrubland, over *Ptilotus obovatus* and *Enchylaena tomentosa* low scattered shrubs;
- *Acacia incurvaneura* tall sparse shrubland over *Acacia grasbyi* mid sparse shrubland over *Ptilotus obovatus*, *Eremophila glutinosa*, *Enchylaena tomentosa* and *Eremophila latrobei* low scattered shrubs;
- *Acacia craspedocarpa* x (hybrid) and *Acacia pteraneura* tall sparse shrubland, over *Eremophila galeata* mid sparse shrubland, over mixed low scattered tussock grasses;
- *Acacia pruinocarpa*, *Acacia pteraneura*, *Acacia ?fuscaneura* and *Acacia ?caesaneura* (narrow phyllode variant) tall open shrubland, over *Acacia tetragonophylla* mid scattered shrubs, over *Ptilotus obovatus* low scattered shrubs;
- *Acacia pruinocarpa*, *Acacia pteraneura* and *Acacia aneura* tall sparse shrubland, over *Acacia aptaneura*, *Acacia tetragonophylla* and *Eremophila galeata* mid sparse shrubland, over *Ptilotus obovatus* low scattered shrubs;
- *Acacia pteraneura* and *Acacia incurvaneura* tall open shrubland, over *Eragrostis eriopoda* low scattered tussock grasses;
- *Acacia pteraneura* tall open shrubland, over *Acacia craspedocarpa* mid open shrubland, over *Eremophila forrestii* subsp. *forrestii* low open shrubland;
- *Acacia quadrimarginea*, *Acacia incurvaneura* and *Acacia aptaneura* tall open shrubland, over *Sida ?ectogama* scattered low shrubs;
- *Acacia pteraneura*, *Acacia pruinocarpa* tall open shrubland, over *Ptilotus obovatus* low scattered shrubs; and *Acacia pteraneura* and *Acacia ?fuscaneura* tall open shrubland over *Eremophila forrestii* subsp. *forrestii* mid shrubland.

Clearing Description Big Bell Gold Operation Pty Ltd proposes to clear up to 278.91 hectares of native vegetation within a total boundary of approximately 1367 hectares, for the purpose of mineral exploration and access tracks. The project is located approximately 50 kilometres south Meekatharra in the Cue.

Vegetation Condition	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994). To: Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).
Comment	The condition of the vegetation under application was determined via a flora and vegetation survey conducted over the Culculli and Paddy Italiano Project areas by MWH (2016), which cover the majority of the application area.

3. Assessment of application against Clearing Principles

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

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

The application area occurs within the Eastern Murchison (MUR1) subregion of the Murchison Interim Biogeographic Regionalisation for Australia (IBRA) bioregion (GIS Database). This subregion is characterised by its internal drainage, and extensive areas of elevated red desert sandplains with minimal dune development. (CALM, 2002). Vegetation is dominated by Mulga Woodlands often rich in ephemerals; hummock grasslands, saltbush shrublands and Halosarcia shrublands (CALM, 2002).

A Level 1 flora survey was conducted over the majority of the clearing permit boundary area. The area surveyed corresponds with the area's most likely to experience disturbance as a result of proposed mining activities and includes the Culculli and Paddy Italiano Project areas (MWH, 2016). The application area has been subject to historical mining, exploration activities, grazing and feral animals (MWH, 2016). The condition of the vegetation surveyed within the application area ranged from 'Very Good' to 'Completely Degraded.' The majority (over 80%) was considered to be in 'Very Good' condition (MWH, 2016).

A total of 83 flora taxa from 20 families and 39 genera were recorded during the flora survey. The diversity and composition recorded is typical of the Murchison region (MWH, 2016) and no regionally significant vegetation types were identified.

According to available databases, two Priority 3 flora species and one Priority 4 flora species have been recorded within the local area (20 kilometre radius) (DPaW, 2016). No Priority flora species were recorded during a Level 1 flora survey conducted within the application area (MWH, 2016).

No Threatened Ecological Communities (TECs) or Priority Ecological Communities (PECs) are known within the application area (GIS Database) and none were identified during the flora and vegetation survey. The closest community of conservation significance is a PEC, which is located approximately 10 kilometres north-north west.

The Beard vegetation units mapped within the application area (Beard vegetation associations 18 and 39) are well represented and the three broad fauna habitats identified within the application are considered to be common and widespread (MWH, 2016).

While no introduced (weed) species were recorded within the application area during the flora survey (MWH, 2016), weeds are known from the local area and are likely to occur in the vicinity of historically disturbed sites. The introduction and spread of weeds must be controlled as weeds have the potential to alter the biodiversity of an area, competing with native vegetation for available resources and making areas more fire prone. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

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

Methodology CALM (2002)
DPaW (2016)
MWH (2016)

GIS Database:
- IBRA WA (Regions - Sub Regions)
- Imagery
- Pre-European vegetation
- Threatened and Priority Ecological Communities Buffers
- Threatened and Priority Ecological Communities Boundaries

(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**

Three broad fauna habitats were identified within the application area during the fauna survey (MWH, 2016):

- Mulga Shrubland;
- Low Stony Rise; and

- Drainage lines.

Thirty three vertebrate fauna species were recorded and two species of conservation significance were considered likely to occur within the application area; the Rainbow Bee-eater (*Merops ornatus* - EPBC Act, Migratory) and the Good-legged Lerista (*Lerista eupoda*) a Priority 1 listed species recognised by the Department of Parks and Wildlife (DPaW) as being of conservation significance.

The Rainbow Bee-eater is likely to utilise drainage lines present within the application area, but is also regularly recorded in disturbed habitats including roadside vegetation and in quarries, mines or gravel pits, where they often breed (DotE, 2016). This species is widely distributed and is unlikely to be significantly impacted by the proposed clearing activities. The Good-legged Lerista is likely to occur within sandy substrates not commonly found in the application area (MWH, 2016).

Given that the application area is adjacent to an existing operational mine site that is highly disturbed and well vegetated areas of similar native vegetation occur throughout the local area and bioregion (GIS Database; MWH, 2015), the vegetation under application is unlikely to provide significant habitat for local fauna species, including species of conservation significance.

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

Methodology DotE (2016)
MWH (2016)

GIS Database:
- DPaW Tenure
- Imagery

(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**
According to available databases, there are no species of Threatened flora species have been recorded within the local area (20 kilometre radius) (DPaW, 2016). A Level 1 flora survey was conducted over the majority of the application area in 2016 by MWH and no Threatened flora were identified (MWH, 2016).

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

Methodology DPaW (2016)
MWH (2016)

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 at variance to this Principle**
According to available datasets, there are no Threatened Ecological Communities (TECs) within the application area (GIS Database). During a level 1 flora and vegetation survey of the application area, no TECs were recorded and none of the vegetation units mapped within the application area were considered analogous to any known TECs (MWH, 2016).

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

Methodology MWH (2016)

GIS Database:
- Threatened and Priority Ecological Communities Buffers
- Threatened and Priority Ecological Communities Boundaries

(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 occurs within the Murchison Interim Biogeographic Regionalisation of Australia (IBRA) bioregion, in which approximately 99.7% of the pre-European vegetation remains (see table below) (GIS Database; Government of Western Australia, 2014).

The vegetation within the application area has been mapped as Beard vegetation associations 18 and 39 (GIS Database). Both of which retain more than 99% of pre-European level of vegetation at a state and bioregional level respectively (Government of Western Australia, 2014). Given the amount of vegetation remaining in the local area and bioregion, the vegetation under application is not considered to be significant as a remnant within

an extensively cleared area.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in DPaW Managed Lands*
IBRA Bioregion - Murchison	28,120,587	28,044,823	99.7	Least Concern	~ 7.70
Beard veg assoc. – State					
18	24,002,623	23,870,558	99.5	Least Concern	~ 8.89
Beard veg assoc. – Bioregion					
18	12,403,172	12,363,252	99.7	Least Concern	~ 4.96
Beard veg assoc. – State					
39	6,613,569	6,602,580	99.8	Least Concern	~ 12.11
Beard veg assoc. – Bioregion					
39	1,148,400	1,138,065	99.1	Least Concern	~ 3.56

* 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 Commonwealth of Australia (2001)
Department of Natural Resources and Environment (2002)
Government of Western Australia (2014)

GIS Database:
- DPaW Tenure
- IBRA Australia
- Imagery
- 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

According to available databases there are no major permanent wetlands or watercourses mapped within the application area; however several minor non-perennial watercourses intersect the application area (GIS Database). Vegetation has been mapped growing in association with these drainage lines, therefore the proposed clearing is considered to be at variance to Principle (f). Potential impacts to vegetation growing in association with a watercourse as a result of the proposed clearing may be minimised by the implementation of a watercourse management condition.

While the clearing permit boundary area is approximately 1,367 hectares, the proposed clearing of 278.91 hectares of native vegetation will likely be required closer to existing pits, which are proposed to be expanded and mined, and areas of riparian vegetation (especially in the central part of the application area) will be avoided. The vegetation growing in association with drainage lines is considered to be comprised of a habitat type that is widespread and well represented throughout the bioregion (MWH, 2016).

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

Methodology MWH (2016)

GIS Database:
- Hydrography, linear
- Hydrography, linear (hierarchy)

(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

Areas of erosion are widespread in the Murchison region, although where areas of good or better condition vegetation remain; erosion is much less prevalent (DAWA, 1994). Given that there are areas within the application area that have been subject to disturbances including historical mining, exploration activities,

grazing and feral animals (MWH, 2016 (MWH, 2016) and several minor non-perennial watercourses intersect the application area (GIS Database), land degradation issues may arise as a result of the proposed clearing. Potential land degradation as a result of the proposed clearing may be minimised by the implementation of a staged clearing condition.

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

Methodology DAWA (1994)
MWH (2016)

GIS Database
- Soils, Statewide

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

Comments **Proposal is not at variance to this Principle**

The proposed clearing is not located within a conservation area and there are no conservation areas within 50 kilometres of the application area (GIS Database).

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

Methodology GIS Database:
- DPaW Tenure
- Imagery

(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**

The application area is not located within a Public Drinking Water Source Area (PDWSA) (GIS Database). The nearest PDWSA is the Cue Water Reserve which is located approximately 45 kilometres south west of the application area (GIS Database).

Several minor non-perennial watercourses intersect the application area (GIS Database) and these drainage lines may be broadly related to the nearby Lake Annean, which is recognised as an Environmentally Sensitive Area and a Nationally Important Wetland. Lake Annean is located approximately 15 kilometres south (MWH, 2016).

Surface waters in the local area typically flow south over low broad slopes with grooved vegetated drainage lines linking into tributaries, which ultimately flow into Lake Annean or Nallan Creek (Metals X, 2015). In general terms, light rainfall events over extended periods will produce small volumes of runoff due to initial soakage rates and evaporation and heavier intense rainfall events usually produce higher velocity flows, resulting in naturally high sediment loads. A significant volume of water will be lost to infiltration due to the high permeability of the sandy soils, thereby reducing the risk of high loads of sediments being transported into the downstream catchments (Metals X, 2015). Impacts associated with the proposed clearing, can be minimised by the implementation of standard surface water management measures. In addition to this, potential impacts to the quality of surface water as a result of the proposed clearing may be minimised by the implementation of a watercourse management condition.

Groundwater salinity within the application area is between 1,000 – 3,000 milligrams per litre of Total Dissolved Solids (TDS) (GIS Database). While other mining related activities may impact on the quality of local groundwater, the proposed clearing of 278.91 hectares of native vegetation within the Murchison River catchment area (10,376,751 hectares), in the vicinity of exiting mining disturbance, is unlikely to result in any significant adverse impacts to groundwater quality.

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

Methodology MWH (2016)
Metals X (2015)

GIS Database:
- Groundwater Salinity, Statewide
- Hydrography, linear
- Public Drinking Water Source Areas (PDWSAs)
- RIWI Act, Groundwater 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 Murchison region experiences an arid climate, experiencing both summer and winter rain (BoM, 2016). Mean annual rainfall for Cue (nearest recording site) is approximately 234 mm and evaporation far exceeds

rainfall (BoM, 2016). Due to the high permeability and free draining nature of the soils present within the application area, flooding issues are unlikely to arise as a result of clearing. Potential issues can be managed by the implementation of standard surface water management strategies (MWH, 2016).

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

Methodology BoM (2016)

GIS Database:
- Hydrography, linear

Planning instrument, Native Title, RIWI Act Licence, EP Act Licence, Works Approval, Previous EPA decision or other matter.

Comments

There is one native title claim over the application area (WC1999/046) (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*.

According to available datasets, one Site of Aboriginal Significance is located within the application area (DAA, 2016). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Sites of Aboriginal Significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of Environment Regulation, the 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 29 August 2016 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received in relation to this application.

Methodology DAA (2016)

4. References

- BoM (2016) Climate Statistics for Australian Locations. A Search for Climate Statistics, Australian Government Bureau of Meteorology. <<http://www.bom.gov.au>> (Accessed August 2016).
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Department of Conservation and Land Management.
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DAA (2016) Aboriginal Heritage Inquiry System, Department of Aboriginal Affairs, Perth, Western Australia < <http://maps.dia.wa.gov.au>> (Accessed August 2016).
- DAWA (1994) Technical Bulletin No.84: An inventory and condition survey of the Murchison River Catchment and surrounds, Western Australia. Department of Agriculture, South Perth, Western Australia.
- 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.
- DotE (2016) *Merops ornatus* in Species Profile and Threats Database, Department of the Environment, Canberra <<http://www.environment.gov.au>> (Accessed August 2016).
- DPaW (2016) NatureMap, Department of Parks and Wildlife <<http://naturemap.dec.wa.gov.au>> (Accessed August 2016).
- Government of Western Australia (2014) 2014 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2014. WA Department of Environment and Conservation, 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.
- Metals X (2015) Supporting Information for Clearing Permit Application, Reedy Project Area – Central Murchison Gold Project. Metals X Group, West Perth, Western Australia
- MWH (2016) Level 1 Flora, Vegetation and Fauna Assessment. Report prepared for Metals X Limited by MHW Global, May 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)
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	<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	<p>Threatened species: Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, 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).</p> <p>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.</p> <p>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.</p> <p>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.</p>
CR	<p>Critically endangered species Threatened species considered to be facing an extremely high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.</p>
EN	<p>Endangered species Threatened species considered to be facing a very high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.</p>
VU	<p>Vulnerable species Threatened species considered to be facing a high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.</p>
EX	<p>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 <i>Wildlife Conservation Act 1950</i>, 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.</p>
IA	<p>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 <i>Wildlife Conservation Act 1950</i>, in Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice.</p>
CD	<p>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 <i>Wildlife Conservation Act 1950</i>, in Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice.</p>
OS	<p>Other specially protected fauna</p>

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.