



## 1. Application details

### 1.1. Permit application details

Permit application No.: 005/1  
Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: Kundana Gold Pty Ltd

### 1.3. Property details

Property: Mining Lease M16/157 (M16/157)  
Mining Lease M16/72 (M16/72)  
Local Government Area: Shire Of Coolgardie  
Colloquial name:

### 1.4. Application

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

## 2. Site Information

### 2.1. Existing environment and information

#### 2.1.1. Description of the native vegetation under application

##### Vegetation Description

The proposed clearing area is mapped as Beard Vegetation Association 180: Succulent steppe with open low woodland, mulga and sheoak over salt bush (Shepherd et al 2001).

Three finer scale vegetation surveys have also been conducted over the area under application. Mattiske Consulting (1999) described six plant communities being: A1 - Open Shrubland of *Acacia linophylla* & *A. tetragonophylla* over chenopod shrubs with emergent gimlet & casuarina; A2 - Open shrubland of *Acacia linophylla* over chenopod shrubs; E1 - Low Woodland of *Eucalyptus celastroides* over annual *Asteraceae* & *Poaceae* in wet swales; E2 - Woodland of *E. lesouefii* & *E. salubris*; M1 - Tall Shrubland of *Melaleuca lateriflora* over open clay bogs and C1 - Low Chenopod Shrubland of *Halosarcia* over low annuals on low lying drainage line.

Eddie Van Etten (2005) described six plant communities being: Woodland of *Acacia ramulosa* &/or *A. burkittii*; Open Woodland of *Eucalyptus salmonophloia*; Mixed *Halosarcia* spp. low shrubland; Woodland of *E. olelandii* - *E. celastroides*; Open Woodland of *Casuarina pauper*; and Woodland of *E. griffithsii* with hummock grass understorey.

Jim Seeds, Woods and Trees (2005) described five vegetation groups: (1) Chenopod shrubland; (2) *Eucalyptus celastroides* woodland; (3) *E. gracilis* dense thicket; (4) *E. gracilis* woodland; and (5) *E. olelandii* woodland.

##### Clearing Description

The proposal includes the clearing of 36 ha within M16/157 & M16/72 for the purpose of mineral production (Placer Dome, 2005).

##### Vegetation Condition

Very Good: Vegetation structure altered; obvious signs of disturbance (Kelghery 1994)

##### Comment

Van Etten (2005) described the area as being an active mine area with a number of open pit gold mines, waste dumps and infrastructure. There has been intermittent mining activity over the past 100 years. The area was also logged for timber and grazed.

### 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 area of the proposal falls within the Coolgardie Bioregion, a large area that remains largely uncleared (98.5%) (Shepherd et al, 2001). The region has been used extensively for pastoral and mining activities and is described as being extensively degraded (CALM, 2002).

van Etten (2005) found that plant communities within the proposed clearing area are widespread and common throughout the region. None of the communities present are listed as Threatened Ecological Communities. van Etten also determined that levels of plant species richness were low to moderate compared with other communities sampled at other active mine sites and in WA generally. van Etten did note that annual species were not recorded due to the lack of rain preceding sampling.

No fauna species of conservation significance have been recorded at the site. ATA Environmental (2006) concluded that only one species of conservation significance, the Rainbow Bee-eater, is likely to frequent the site. However, the 36 ha proposed to be cleared is a small fraction of the suitable habitat available to this species in the region. Other species that are less likely to occur at the site also have vast areas of suitable habitat in the region and their conservation will not be affected by the loss of the 36 ha of vegetation proposed to be cleared. ATA Environmental conclude that there is no evidence to suggest that the site contains an ecosystem or ecosystem value that is of conservation significance from a faunal perspective.

CALM advice is that the area under application has undergone disturbance through grazing, exploration and mining and as such the vegetation conditions and biodiversity value of the area is subsequently diminished (CALM, 2006).

Placer Dome (2005) have stated that all efforts will be made to minimise clearing and progressively rehabilitate disturbed areas. Topsoil and vegetation will be stockpiled and respread where possible to provide habitat for fauna.

This proposal is considered not likely to be at variance to this principle.

##### Methodology

ATA Environmental (2006)  
CALM (2006)  
Placer Dome (2005)  
Shepherd et al (2001)  
van Etten, E. (2005)

#### (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**

ATA Environmental conducted a Level 1 fauna assessment of the proposed area to be cleared in March 2006. This involved search of CALM's Threatened Fauna Database for the study area, a search of Western Australian Museum Fauna Database and a search of the Commonwealth DEH Database to provide a list of those species that may occur in the area. A site visit was conducted by Dr Graham Thompson and Dr Scott Thompson on 12th Jan 06 to look for evidence of the presence of or suitable habitat for 19 species identified in the database survey as conservation significant species. These species are Carnaby's Cockatoo (*Calyptorhynchus latirostris*), Red Tailed Phascogale (*Phascogale calura*), Chuditch (*Dasyurus geoffroii*), Slender-billed Thornbill (*Acanthiza lineolata*), Mallard Duck (*Anas platyrhynchos*), Numbat (*Myrmecobius fasciatus*), Great Egret (*Ardea alba*), Fork-tailed Swift (*Apus pacificus*), Rainbow Bee-eater (*Merops ornatus*), Carpet Python (*Morelia spilota imbricata*), Shy Heathwren (*Hylacola cauta whitlocki*), Western Rosella (*Platycercus icterotis xanthogenys*), Australian Bustard (*Ardeotis australis*), Crested Bellbird (*Oreocera gutturalis gutturalis*), White Browed Babbler (*Pomatostomus superciliosus ashbyi*), Hooded Plover (*Charadrius rubricollis*), Branchinella denticulata (a fairy shrimp), Jalmenus aridus (a butterfly), Ogyris subterrestris petrina (a butterfly). ATA Environmental provided a discussion on each of these species.

The Carnaby's Cockatoo are not historically recorded for this location and the species was not observed during the field survey conducted by ATA Environmental. ATA Environmental surveyed for available nesting trees and foraging sites and concluded that it would be highly unlikely that the species would occur within the proposed clearing area.

The Red Tailed Phascogale was not observed during the field survey and has not been caught in the general area. It prefers wandoo, sheoak habitat and is unlikely to be found within the proposed clearing area.

The Chuditch is not recorded in the eastern Goldfields north of Kalgoorlie, but have been recorded south of the Great Eastern Highway near Mt Holland, Forrestania, Kambalda East. It is unlikely that this species occurs within the proposed clearing area.

The Slender-billed Thornbill occurs in chenopod shrublands and samphire flats. This habitat type is not found



within the proposed clearing area and therefore it is unlikely that the species occurs there.

The Numbat has not been recorded north of Kalgoorlie for many years and occurs mainly at Dryandra and the Perup/Kingston area. It is not likely that the species occurs within the proposed clearing area.

The Great Egret is a migratory species preferring shallow freshwater and salt water lakes and is not likely to forage away from these habitats. The species is not likely to be within the vicinity of the proposed clearing area.

The Fork-tailed Swift is a migratory species and may be an occasional visitor to the area. The 36 ha proposed to be cleared represents a small fraction of the total habitat this species could potentially utilise and as such the species is not likely to be impacted by the proposed clearing.

The Rainbow Bee-eater is also a migratory species and utilises a wide variety of habitat types for feeding and nests in soft sand where it can burrow. The 36 ha proposed to be cleared represents a small fraction of the total habitat this species could potentially utilise and as such the species is not likely to be impacted by the proposed clearing.

The South West Carpet Python utilises a wide variety of habitat types and occurs at low densities throughout the south west. The 36 ha proposed to be cleared represents a small fraction of the total habitat this species could potentially utilise and as such the species is not likely to be impacted by the proposed clearing.

The Shy heathwren prefers the shrub understorey of eucalypt woodlands. Kalgoorlie is the north east border of its distribution. The 36 ha proposed to be cleared represents a small fraction of the total habitat this species could potentially utilise and as such the species is not likely to be impacted by the proposed clearing.

The inland subspecies of the Western Rosella is known to occur in the Kalgoorlie area. The 36 ha proposed to be cleared represents a small fraction of the total habitat this species could potentially utilise and as such the species is not likely to be impacted by the proposed clearing.

The Australian Bustard prefer wooded grasslands, chenopod flats, low heathlands and farm areas. The species has been observed by mining staff in the area. The 36 ha proposed to be cleared represents a small fraction of the total habitat this species could potentially utilise and as such the species is not likely to be impacted by the proposed clearing.

The Crested Bellbird prefers Banksia scrub and heathlands in the south west and is regarded as being found in the general area where it utilises several habitat types. Action Plan for Australian Birds 2000 (Garnet et al, 2000) list its threats as clearing and habitat fragmentation. However, the 36 ha proposed to be cleared represents a small fraction of the total habitat this species could potentially utilise and as such the species is not likely to be impacted by the proposed clearing.

The White-browed Babbler prefers thickets and scrub in semi arid areas. It is known from the general area and is distributed throughout the western goldfields. Action Plan for Australian Birds 2000 (Garnet et al, 2000) list its threats as clearing and habitat fragmentation. However, the 36 ha proposed to be cleared represents a small fraction of the total habitat this species could potentially utilise and as such the species is not likely to be impacted by the proposed clearing.

Hooded Plover's are found around the margins and shallows of salt lakes and coastal beaches. It is probable that the species breeds in samphire habitat within the region. However, this habitat type is not represented within the proposed clearing area.

*Branchinella denticulata* is a fairy shrimp known from Gldgl Lake, north of Kalgoorlie. The proposed clearing area does not include this habitat type and it is not likely that the species would occur within the proposed clearing area.

*Jalmenus andus* is a butterfly known from only one location, near Kalgoorlie. The habitat type recorded for this species does not occur within the proposed clearing area and it is not likely that the species would occur within the proposed clearing area.

*Ogyris subterrestris petrina* is known from one location north east of Lake Douglas and not considered likely to occur within the proposed clearing area.

CALM advised that based on the supporting information provided with the application, it would appear unlikely that any fauna of conservation significance would be impacted by this proposal (CALM 2006).

The proposal is not likely to be at variance to this principle.



**(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**

Three flora surveys have been conducted over the area contained within the proposal (Mattiske 1999, Eddie Van Etten 2005, Jims Seeds, Weeds & Trees (2005). No threatened flora was found in any survey. Desktop analysis of available CALM threatened flora databases was also conducted prior to surveys. No declared rare or priority flora taxa are recorded from within the local area of the proposed clearing area or within a 15 km radius (GIS database).

CALM's Clearing Assessment Unit preliminary advice is that from information provided for the permit application it would appear unlikely that any flora or fauna of conservation significance would be impacted by this proposal (CALM, 2006a). After examining a draft assessment report, supporting documentation, CALM database information and Regional CALM Advice, CALM's Clearing Assessment Unit advises that it would appear unlikely that this proposal would be at variance to any of the relevant biodiversity principles. As previously advised by CALM, the area under application has undergone historical disturbance through grazing, exploration and mining activity and as such the vegetation condition and biodiversity value of the area is subsequently diminished. Furthermore, the area has been the target of several flora and fauna assessments, the findings of which did not identify the presence of any threatened flora or significant fauna habitat which would necessitate further management consideration (CALM, 2006b).

The proposal is not likely to be at variance to this principle.

**Methodology** CALM (2006a)  
CALM (2006b)  
Eddie Van Etten (2005)  
GIS database: Declared Rare and Priority Flora list - CALM 01/07/05  
Jims Seeds, Weeds & Trees (2005)  
Mattiske Consulting (1999)

**(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 (TEC's) in the proposed clearing area. A GIS database search shows that there are no TEC's within a 50 km radius around it.

Three flora surveys have been conducted over the proposed clearing area also (Mattiske 1999, Van Etten 2005, Jims Seeds, Weeds and Trees 2005a) and no TEC's were identified.

Therefore, this proposal is not likely to be at variance with this principle.

**Methodology** GIS Database: Threatened Ecological Communities - CALM 12/04/05  
Eddie Van Etten (2005)  
Jims Seeds, Weeds and Trees (2005)  
Mattiske Consulting (1999)

**(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 likely to be at variance to this Principle**

The proposed clearing area is mapped as Beard Vegetation Association 480. According to Shepherd et al (2001), approximately 100% of this vegetation association remains.

	Pre-European area (ha)	Current extent (ha)	Remaining %*	Conservation Status**	% in IUCN Class I-IV reserves
IBRA Bioregion - Coolgardie Shire of Coolgardie	12,917,718*	12,719,084*	98.5%	Least concern	
Beard Vegetation Associations - 480	135,039	135,039	~100%	Least concern	6.5%

\* Shepherd et al. (2001)

\*\* Department of Natural Resources and Environment (2002)

\*\*\* Area within the Intensive Landuse Zone

van Etten (2005) found that plant communities within the proposed clearing area are widespread and common throughout the region. van Etten's survey was not restricted to the proposed clearing area and covers a large area including areas to the north of the proposed clearing area.



Therefore, this proposal is not likely to be at variance to this principle.

**Methodology** Department of Natural Resources and Environment (2002)  
GIS Database: - Pre-European Vegetation DA 01/01  
- IBRA EA 18/10/00  
Sherpherd et al (2001)  
van Etten (2005)

**(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 wetlands within the proposed clearing area. Placer Dome (2005) state that at times of heavy rainfall (cyclonic events) runoff passes to the west of the proposed clearing area to White Flag Lake. Due to low rainfall (mean 266.8 mm) and high evaporation rates, it is unlikely that there will be high surface flow during normal rains.

An interrogation of the GIS database revealed four areas that are subject to inundation that extend marginally into the proposed clearing area. The flora communities given in Jims Seeds, Weeds and Trees (2005) are those of *Eucalyptus clelandii* woodland, *E. celastroides* woodland and *E. gracilis* thicket. The fourth area is a bare salt pan. According to Florabase website (2006), none of these species are indicative of riparian vegetation.

Mattiske (1999) describes the area as comprising of salt lakes and playa lakes. Playa lakes are ephemeral depressions that hold water only after significant rainfall events and riparian vegetation would not be expected in such locations.

Therefore, this proposal is not likely to be at variance with this clearing principle.

**Methodology** Florabase (2006)  
GIS Database: Hydrography, linear - DOE 1/2/04  
Placer Dome (2005)

**(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**

DAWA (2006) have provided advice that interpretation of available information and imagery suggests that the area proposed to be cleared is predominantly low halophytic shrubland growing on level alluvial plain. Red deep duplex soils are likely to be encountered over much of the site. Unless surface flows are concentrated by the mining infrastructure, serious soil erosion is unlikely to occur. Therefore it is concluded that the proposed land clearing is unlikely to be at variance with principle (g) for water erosion. Based on this advice it is unlikely that the proposed clearing will be at variance with this principle.

**Methodology** DAWA (2006)

**(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 clearing associated with this project is unlikely to impact on the environmental and conservation values of any CALM managed areas based on the proximity of the proposed clearing to these areas. Kurrawang Nature Reserve is located approximately 13 km to the south and east of the proposed clearing area. This proposal is not at variance with this principle.

**Methodology** GIS Database: CALM Managed Lands and Waters - CALM 1/07/05

**(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 groundwater in the application area is hypersaline, with salinities ranging from 90000 to 200000 mg/L total dissolved solids. The water table is 5 m below surface and will be drawn down in the vicinity of mine activity through de-watering (Placer Dome, 2005). There is expected to be little recharge due to low rainfall and high evaporation rates. Therefore, it is unlikely that the clearing of 36 ha of vegetation will have a significant impact on the recharge of the aquifer or the quality of surface water.

There are no permanent water bodies or water courses on site, nor any in the general area. The proponent



has stated that levee banks will divert surface run-off into existing drainage channels. Therefore the proposed clearing is not likely to be at variance with this principle.

Methodology Placer Dome (2005)

**(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 area receives low annual rainfall (266.8mm) and experiences high annual evaporation rates (2644mm). The landscape is flat and water may pool temporarily in clay playas located nearby during extreme rainfall events. The high evaporation rates suggests that localised ponding would be minimal and short term. Levee banks will also divert water into existing drainage channels. The likelihood of flooding or water logging increasing during flood peak as a result of the clearing of 36 ha of vegetation is therefore low. In addition, the water table is 5m below the surface and is being drawn down by dewatering at the mine. The proposed clearing is not likely to be at variance with this principle.

Methodology

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

**Comments**

There are two Native Title Claims over the area under application; WC98/027 and WC98/029. These claims have been registered with the National Native Title Tribunal on behalf of the Widji and Central West Goldfields claimant groups respectively. However, the mining tenements have been granted, and the clearing is for a purpose consistent with the tenement type, therefore the granting of a clearing permit is not a future act under the Native Title Act, 1993. There are no sites of Aboriginal Significance within the proposed clearing area.

Kundana Gold have a Department of Environment (DoE) License NO. 7323/7. DoE have advised that this license is the subject of ministerial questions (under appeal). Kundana Gold have a current Groundwater License GWL107022. There is also an appeal on the re-issue of miscellaneous license that Kundana have historically had access to (not subject of this application to clear).

Methodology DoE (2000)

GIS database: - Aboriginal Sites of Significance - DIA  
- Native Title Claims - DLI 7/11/05

#### 4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Mineral Production	Mechanical Removal	36	Grant	The assessable criteria have been addressed and the proposal is not at variance with principle h and not likely to be at variance to principles a, b, c, d, e, f, g, i and j. Therefore, the assessing officer recommends that the permit be granted.

#### 5. References

- ATA Environmental (2006), Fauna Assessment, Proposed Clearing Around the Moonbeam Mine Site, Version 2, March 2006. Report prepared for Placer Dome Moonbeam Extended Project, Perth Western Australia
- CALM (2006). Florabase. <http://florabase.calm.wa.gov.au>
- CALM Land Clearing proposal advice (2006). Advice to Assessing Officer, Department of Industry and Resources. Department of Conservation and Land Management, Western Australia.
- CALM Preliminary Land Clearing proposal advice (2006). Advice to Assessing Officer, Department of Industry and Resources. Department of Conservation and Land Management, 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.
- DOE (2006). Water Allocation/License Advice - Advice to Assessing Officer, Department of Industry and Resources. Department of Environment, Western Australia
- Jlm's Seeds, Weeds & Trees Pty Ltd (2005), Vegetation Survey of Proposed Clearing at Christmas Mine Site for Placer Dome Australia, Kundana Gold Pty Ltd. Kalgoorlie, Western Australia.
- Keighery, B.J. (1994) Bushland Plant Survey. A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Mattiske Consulting (1999), Flora and Vegetation Survey of Homestake Lease, Kundana Gold. Report prepared for Kundana Gold Pty Ltd, Perth, Western Australia
- Placer Dome Pty Ltd (2006) Area Permit Application Moonbeam Extended Project, November 2005. Unpublished report to the Department of Industry and Resources, Perth Western Australia.
- Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.
- van Etten, E. (2005), Vegetation and Flora of Kundana Mining Area. A report Prepared for Placer Dome Inc. Edith Cowan University, Perth, Western Australia.



## 6. Glossary

### Acronyms:

BoM	Bureau of Meteorology, Australian Government.
CALM	Department of Conservation and Land Management, Western Australia.
DAWA	Department of Agriculture, Western Australia.
DA	Department of Agriculture, Western Australia.
DEH	Department of Environment and Heritage (federal based in Canberra) previously Environment Australia
DEP	Department of Environment Protection (now DoE), Western Australia.
DIA	Department of Indigenous Affairs
DLI	Department of Land Information, Western Australia.
DoE	Department of Environment, Western Australia.
DoIR	Department of Industry and Resources, Western Australia.
DOLA	Department of Land Administration, Western Australia.
EP Act	Environment Protection Act 1986, Western Australia.
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Federal Act)
GIS	Geographical Information System.
IBRA	Interim Biogeographic Regionalisation for Australia.
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
RIWI	Rights in Water and Irrigation Act 1914, Western Australia.
s.17	Section 17 of the Environment Protection Act 1986, Western Australia.
TECs	Threatened Ecological Communities.

### Definitions:

(Atkins, K (2005). *Declared rare and priority flora list for Western Australia, 22 February 2005*. Department of Conservation and Land Management, Como, Western Australia) :-

P1	<b>Priority One - Poorly Known taxa:</b> taxa which are known from one or a few (generally <5) populations which are under threat, either due to small population size, or being on lands under immediate threat, e.g. road verges, urban areas, farmland, active mineral leases, etc., or the plants are under threat, e.g. from disease, grazing by feral animals, etc. May include taxa with threatened populations on protected lands. Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.
P2	<b>Priority Two - Poorly Known taxa:</b> taxa which are known from one or a few (generally <5) populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey.
P3	<b>Priority Three - Poorly Known taxa:</b> taxa which are known from several populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but are in need of further survey.
P4	<b>Priority Four – Rare taxa:</b> taxa which are considered to have been adequately surveyed and which, whilst being rare (in Australia), are not currently threatened by any identifiable factors. These taxa require monitoring every 5–10 years.
R	<b>Declared Rare Flora – Extant taxa (= Threatened Flora = Endangered + Vulnerable):</b> taxa which have been adequately searched for, and are deemed to be in the wild either rare, in danger of extinction, or otherwise in need of special protection, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.
X	<b>Declared Rare Flora - Presumed Extinct taxa:</b> taxa which have not been collected, or otherwise verified, over the past 50 years despite thorough searching, or of which all known wild populations have been destroyed more recently, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.

(Wildlife Conservation (Specially Protected Fauna) Notice 2005) [Wildlife Conservation Act 1950] :-

Schedule 1	<b>Schedule 1 – Fauna that is rare or likely to become extinct:</b> being fauna that is rare or likely to become extinct, are declared to be fauna that is need of special protection.
Schedule 2	<b>Schedule 2 – Fauna that is presumed to be extinct:</b> being fauna that is presumed to be extinct, are declared to be fauna that is need of special protection.
Schedule 3	<b>Schedule 3 – Birds protected under an international agreement:</b> being birds that are subject to an agreement between the governments of Australia and Japan relating to the protection of migratory birds and birds in danger of extinction, are declared to be fauna that is need of special protection.



**Schedule 4**     **Schedule 4 – Other specially protected fauna:** being fauna that is declared to be fauna that is in need of special protection, otherwise than for the reasons mentioned in Schedules 1, 2 or 3.

{CALM (2005). *Priority Codes for Fauna*. Department of Conservation and Land Management, Como, Western Australia) :-

- P1**            **Priority One: Taxa with few, poorly known populations on threatened lands:** Taxa which are known from few specimens or sight records from one or a few localities on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, active mineral leases. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P2**            **Priority Two: Taxa with few, poorly known populations on conservation lands:** Taxa which are known from few specimens or sight records from one or a few localities on lands not under immediate threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, vacant Crown land, water reserves, etc. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P3**            **Priority Three: Taxa with several, poorly known populations, some on conservation lands:** Taxa which are known from few specimens or sight records from several localities, some of which are on lands not under immediate threat of habitat destruction or degradation. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.
- P4**            **Priority Four: Taxa in need of monitoring:** Taxa which are considered to have been adequately surveyed, or for which sufficient knowledge is available, and which are considered not currently threatened or in need of special protection, but could be if present circumstances change. These taxa are usually represented on conservation lands.
- P5**            **Priority Five: Taxa in need of monitoring:** Taxa which are not considered threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

**Categories of threatened species (*Environment Protection and Biodiversity Conservation Act 1999*)**

- EX**            **Extinct:** A native species for which there is no reasonable doubt that the last member of the species has died.
- EX(W)**        **Extinct in the wild:** A native species which:  
                   (a) is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or  
                   (b) has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
- CR**            **Critically Endangered:** A native species which is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
- EN**            **Endangered:** A native species which:  
                   (a) is not critically endangered; and  
                   (b) is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.
- VU**            **Vulnerable:** A native species which:  
                   (a) is not critically endangered or endangered; and  
                   (b) is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.
- CD**            **Conservation Dependent:** A native species which is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.