



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 6316/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: **Convergent Minerals Limited**

### 1.3. Property details

Property: Mining Lease 77/1065  
Local Government Area: Shire of Yilgarn  
Colloquial name: Mt Holland Gold Project

### 1.4. Application

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

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 11 December 2014

## 2. Site Information

### 2.1. Existing environment and information

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

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Beard vegetation associations have been mapped at a 1:250,000 scale for the whole of Western Australia. One Beard vegetation association has been mapped within the application area (GIS Database).	Mt Holland Gold Project Convergent Minerals Limited proposes to clear up to 30 hectares of native vegetation within a total boundary of approximately 148 hectares for the purpose of mineral production. The project is located approximately 89 kilometres north-east of Hyden, in the Shire of Kondinin.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994);  To  Pristine: No obvious signs of disturbance (Keighery, 1994).	The vegetation condition was assessed by botanists from Native Vegetation Solutions (2014).
511: Medium Woodland; salmon gum and morel (GIS Database).			
A flora and vegetation survey of the application area and it's surrounds was undertaken on 28 and 29 July 2014, with a follow up survey undertaken on 11 August. Two broad vegetation types were identified during the survey (Native Vegetation Solutions, 2014):			

1) *Eucalyptus* Mallee woodland over *Melaleuca* shrubland;

2) *Eucalyptus* woodland over *Allocasuarina* shrubland

## 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 Southern Cross (COO2) sub-region of the Coolgardie Bioregion of the Interim Biogeographic Regionalisation of Australia (IBRA) (GIS Database). This sub-region is characterised by subdued relief, comprising of gently undulating lands dissected by broad valleys with bands of low greenstone hills (CALM, 2002). The valleys of this sub-region have Quaternary duplex and gradational soils, with chains of saline playa-lakes supporting dwarf shrub lands of samphire. Around these lakes, diverse *Eucalyptus* woodlands, rich in endemic eucalypts occur on the low greenstone hills, valley alluvials and broad plains of calcareous earth (CALM, 2002). At mid-level, the granite basement outcrops and supports swards of *Borya constricta*, with stands of *Acacia acuminata* and *Eucalyptus loxophleba*, while the upper-levels are comprised of

the eroded remnants of a lateritic duricrust giving way to yellow sand-plains, gravelly sand-plains and lateritic breakaways. Mallees and scrub-heaths occur on the uplands and sand lunettes associated with playas along the broad valley floors and sand sheets around the granite outcrops (CALM, 2002).

Approximately 65% of the application area has been previously disturbed being a former gold mining operation, and also having recently been burnt (Native Vegetation Solutions, 2014).

A targeted flora survey of the application area identified two vegetation types within the application area (Blueprint Environmental Strategies, 2014). A total of 19 families, 34 genera and 71 species were identified within the application area and surrounding vegetation (Blueprint Environmental Strategies, 2014). No Threatened flora species or Priority flora species were identified within the application area or surroundings (Native Vegetation Solutions, 2014).

No weed species were identified within the application area (Native Vegetation Solutions, 2014).

A search of the Department of Parks and Wildlife (DPAW) Naturemap identified that 9 frog, 60 reptile, 113 bird and 31 mammal species have the potential to be within a 50 kilometre radius of the application area (DPAW, 2014). According to database records and published information, the application area may support eight species protected under the *Environment Protection and Biodiversity Conservation Act 1999* and the *Wildlife Conservation Act 1950* (Blueprint Environmental Strategies, 2014). A Level 1 fauna and habitat survey was conducted by Western Wildlife on 28 - 29 July 2014. Four main habitats for fauna were identified during the site visit: Mallee woodland; Eucalypt Woodland over *Allocasuarina* shrubland; Rehabilitation area (on waste dump); and Cleared land (pit area). Given there has been some previous ground disturbance and recent fire disturbance through much of the application area, potential impacts are likely to be small on both a local and regional scale, as only a small area of fauna habitat will be disturbed within a very large tract of intact woodland (Western Wildlife, 2014).

The application area is within the buffer zone of the Ironcap Hills vegetation complex Priority Ecological Community (PEC) a Priority 3 PEC (GIS Database; Blueprint Environmental Studies, 2014). This PEC includes Mt Holland, Middle Ironcap Hill, North and South Ironcap Hills, Digger Rock and Hatter Hill. This PEC mainly targets and encompasses the banded ironstone formations within this region, which are not present within the application area (Blueprint Environmental Studies, 2014). The proposed clearing is not likely to have an impact on this PEC.

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

**Methodology** Blueprint Environmental Strategies (2014)  
DPAW (2014)  
Native Vegetation Solutions (2014)  
Western Wildlife (2014)  
GIS Database:  
- IBRA WA (Regions - Subregions)  
- 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 may be at variance to this Principle**

A search of the Department of Parks and Wildlife (DPAW) Naturemap identified that 9 frog, 60 reptile, 113 bird and 31 mammal species have the potential to be within a 50 kilometre radius of the application area (DEC, 2014). A Level 1 fauna and habitat survey was conducted by Western Wildlife on 28 to 29 July 2014. Four fauna habitats were identified within the application area. These being:

- Mallee Woodland
- Eucalypt Woodland over *Allocasuarina* shrubland
- Rehabilitation area (on waste dump)
- Cleared land (pit area)

Similar habitats identified during the fauna survey of the application area have also been recorded in the greater surrounding area (Western Wildlife 2014). While the application area may provide important fauna habitat, the surrounding area is largely vegetated with intact woodland (Western Wildlife 2014) and also provides suitable fauna habitat.

Based on habitats available and known distributions, a total of 17 Schedule or Priority fauna species may potentially occur in the area: Carpet Python (*Morelia spilota subsp. imbricata*), Lake Cronin Snake (*Paraplocephalus atriceps*), Spotted Knob-tail (*Nephrurus stellatus*), Malleefowl (*Leipoa ocellata*), Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*), Peregrine Falcon (*Falco peregrinus*), Rainbow Bee-eater (*Merops ornatus*), Fork-tailed Swift (*Apus pacificus*), Inland Western Rosella (*Platycercus ictrotis*), Shy Heathwren (*Hylacola cauta*), White-browed Babbler (*Pomatostomus superciliosus*), Crested Shrike-tit (*Famunculus frontatus*), Crested Bellbird (*Oreoica gutturalis*), Chuditch (*Dasyurus geoffroyi*), Red-tailed Phascogale (*Phascogale calura*), Western Brush Wallaby (*Macropus irma*), Central Long-eared Bat (*Nyctophilus*

*tomoriensis*) (Western Wildlife, 2014).

Some of the conservation significant species are considered to be highly mobile, have a wide distribution and/or are able to utilise a wide range of habitat types so the clearing is unlikely to significantly impact on the species (Western Wildlife, 2014). Other species are known mostly from historical records and based on their current distribution these species are not expected to be found in the surrounding area (Western Wildlife, 2014). Of the above mentioned fauna, the following two species are considered most likely to potentially be impacted by the proposed clearing.

Carnaby's Cockatoos (Schedule 1 - Fauna that is rare or likely to become extinct, *Wildlife Conservation (Specially Protected Fauna) Notice, 2012*) forage in woodland and heath that is dominated by proteaceous species and nest in hollows of large eucalypts, usually Salmon Gum and Wandoo (DEC, 2012a). There are several records of this species on DPAW's Naturemap, all from the Forrestania area between 1981 and 2009 (Western Wildlife, 2014). Although not recorded during the site visit, Carnaby's Black Cockatoo may forage in the tall *Allocasuarina* shrublands and eucalypt woodlands in the application area and surrounds. It is unlikely to breed in the application area due to the lack of large hollow-bearing eucalypts (Western Wildlife, 2014). Generally the study area is on the eastern limits of the current range of this species, so Carnaby's Black Cockatoo is only likely to be an occasional or seasonal foraging visitor (Western Wildlife, 2014).

Malleefowl (Schedule 1 - Fauna that is rare or likely to become extinct, *Wildlife Conservation (Specially Protected Fauna) Notice, 2012*) are largely confined to arid and semi-arid woodland that is dominated by Mallee eucalypts on sandy soils, with less than 430 millimetres of rainfall annually (DEC, 2012b). There are records of Malleefowl being within the 40 kilometre search radius of the application area on DPAW's Naturemap website (DEC, 2014) and an inactive Malleefowl mound was recorded during the site visit (Western Wildlife, 2014). The inactive mound appeared to have been unused for at least two years, if not more (Western Wildlife, 2014). As the area it was situated in was recently burnt, it is unlikely to be used until the woodland has regenerated sufficiently to provide leaf litter for use in nest construction. Malleefowl are likely to forage throughout the Mallee woodlands and shrublands of the region, and potentially occur in the study area (Western Wildlife, 2014). Potential impacts to Malleefowl as a result of the proposed clearing may be minimised by the implementation of a fauna management condition.

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

**Methodology** DEC (2014)  
DEC (2012a)  
DEC (2012b)  
Western Wildlife (2014)

**(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 records of Threatened Flora within the application area (Native Vegetation Solutions, 2014; GIS Database). A targeted significant flora survey of the application area did not record any Threatened Flora species or Priority flora species (Native Vegetation Solutions, 2014).

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

**Methodology** Native Vegetation Solutions (2014)  
GIS Database:  
- Threatened and Priority Flora

**(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.**

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

According to available databases, there are no records of any Threatened Ecological Communities (TECs) within the application area (GIS Database). The nearest known TEC is located approximately 150 kilometres south-west of the application area (GIS Database).

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

**Methodology** Blueprint Environmental Studies (2014)  
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 application area falls within the Coolgardie Biogeographic Regionalisation for Australia (IBRA) bioregion (GIS Database). The vegetation of the application area has been broadly mapped as Beard vegetation association 511: Medium Woodland; salmon gum and morel (GIS Database).

This vegetation association remains at approximately 74.31% and 93.7% of pre-European extent, at the state and bioregion levels respectively (see table below). Therefore, the area proposed to be cleared does not represent a significant remnant of native vegetation within 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 - Coolgardie	12,912,204	12,648,491	~97.96	Least Concern	15.53
Beard vegetation associations - State					
511	700,693	520,668	~74.31	Least Concern	14.57
Beard vegetation associations - Bioregion					
511	464,424	435,177	~93.7	Least Concern	18.14

\* Government of Western Australia (2013)

\*\* 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 (2013)  
GIS Database:  
- IBRA WA (Regions - Subregions)  
- Pre-European Vegetation

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

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

There are a series of non-perennial lakes to the east of the application area and parts of the application area may be subject to inundation (DAFWA, 2014; GIS Database). However, a vegetation survey of the application area by botanists from Native Vegetation Solutions did not identify any vegetation growing in, or in association with, a watercourse or wetland (Native Vegetation Solutions, 2014).

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

**Methodology** DAFWA (2014)  
Native Vegetation Solutions (2014)  
GIS Database:  
- Hydrography, Linear

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

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

The application has been mapped as soil type Ya28, which Northcote (1960-68) describes as sandy plains with some clay pans and small salt lakes, dunes and lunettes; chief soils are sandy alkaline mottled yellow soils. The topography of the application area is relatively flat (GIS Database).

Blueprint Environmental Strategies (2014) has advised that Convergent Minerals Limited will undertake measures to minimise land degradation. Management strategies to achieve this include:

- Minimising the area requiring vegetation removal;
- Confining vehicle movements to defined roads and tracks;
- Conducting topsoil-stripping activities during periods of low winds;
- Storing hydrocarbons and refuelling in bunded areas;
- Rehabilitation of completed surfaces to minimise active areas exposed;
- Scarifying or deep ripping (as appropriate) compacted tracks and roads prior to seeding.

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

**Methodology** Blueprint Environmental Strategies (2014)  
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 may be at variance to this Principle**

There are no conservation areas within the vicinity of the application area (GIS Database). The nearest conservation area is the Jilbadji Nature Reserve which is located approximately 11 kilometres north of the application area (GIS Database). The proposed clearing is unlikely to have any significant impact on 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:  
- DEC 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**

The application area is not within a Public Drinking Water Source Area (GIS Database). There are no permanent watercourses within the application area so any surface water present is likely to occur as sheet flow or ephemeral drainage lines (GIS Database). The application area experiences an average annual rainfall of approximately 344.4 millimetres, falling mainly during the winter months (BoM, 2009).

The application area is located in a relatively flat to slightly undulating area which may on occasion be at risk of flooding following intense rainfall events. All watercourses within the application area are ephemeral and for the majority of the year, the drainage systems are dry.

Some localised increase in surface runoff may occur where vegetation is cleared. However, the impact is unlikely to be detectable in the context of the range of the natural variability of runoff (Blueprint Environmental Strategies, 2014). Any potential effects will be short term as the majority of the proposed clearing will be revegetated on completion of operations (Blueprint Environmental Strategies, 2014). Given the above, the proposed clearing is not likely to have any significant impact on surface water quality in the area.

The application area is located within the Yilgarn-Southwest Groundwater Province (GIS Database). The groundwater salinity within the application area is approximately 14,000 - 35,000 milligrams/Litre Total Dissolved Solids (TDS) (GIS Database). Vegetation is not likely to be dependent on groundwater at such a hyper saline level. Given the size of the area to be cleared (30 hectares) compared to the size of the Yilgarn-Southwest Groundwater Province (24,601,260 hectares) (GIS Database), the proposed clearing is not likely to cause salinity levels within the application area to alter significantly. Also, the depth of the water table in the application area, being over 80 metres below the surface, means there is not likely to be any connectivity between surface vegetation and groundwater (Blueprint Environmental Strategies, 2014). The proposed clearing is not likely to deteriorate groundwater quality in the local area.

There are no known groundwater dependent ecosystems within the application area (GIS Database).

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

**Methodology** BoM (2014)  
Blueprint Environmental Strategies (2014)  
GIS Database:  
- Groundwater Provinces  
- Groundwater Salinity, Statewide  
- Potential Groundwater Dependent Ecosystems – DoE 2004  
- Public Drinking Water Source Area (PDWSAs)

**(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**

With an average annual rainfall of 400 millimetres and an average annual evaporation rate of 2,400 millimetres there is likely to be little surface flow during normal seasonal rains (GIS Database). Whilst large rainfall events may result in the flooding of the area, the proposed clearing is not likely to lead to an increase in incidence or intensity of flooding (Blueprint Environmental Strategies, 2014).

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

**Methodology** Blueprint Environmental Strategies (2014)  
GIS Database:  
- Evaporation Isopleths  
- Rainfall, Mean Annual

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

##### Comments

There are no native title claims over the area under application (GIS Database). 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 databases, there are no registered Aboriginal Sites of Significance within the application area (GIS Database). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of Environment Regulation, Department of Parks and Wildlife and the Department of Water to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

The clearing permit application was advertised on 3 November 2014 by the Department of Mines and Petroleum inviting submissions from the public. There were no submissions received.

**Methodology** GIS Database:  
- Aboriginal Sites of Significance  
- Native Title Claims – Determined by the Federal Court  
- Native Title Claims – Filed at the Federal Court  
- Native Title Claims – Registered with the NNTT

#### 4. References

- Blueprint Environmental Strategies (2014) Purpose Permit Application 2 Mt Holland Gold Project, Blue Vein Mine M77/1065. Unpublished report prepared for Convergent Minerals Limited.
- BoM (2014) Bureau of Meteorology Website - Climate Statistics for Australian Locations, HYDEN.  
[http://www.bom.gov.au/climate/averages/tables/cw\\_010568.shtml](http://www.bom.gov.au/climate/averages/tables/cw_010568.shtml) (Accessed 5 December 2014).
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Department of Conservation and Land Management, Western Australia.
- DAFWA (2014) WetlandBase, Department of Agriculture and Food Western Australia, <http://spatial.agric.wa.gov.au/wetlands> (Accessed 5 December 2014).
- DEC (2012) NatureMap - Mapping Western Australia Biodiversity, Department of Environment and Conservation, <http://naturemap.dec.wa.gov.au> (Accessed 5 December 2014).
- DEC (2012a) Fauna Profiles: Carnaby's Cockatoo. Department of Environment and Conservation, Perth.  
[http://www.dpaw.wa.gov.au/images/documents/plants-animals/threatened-species/carnabys/Carnabys\\_black\\_cockatoo\\_-\\_species\\_profile\\_2012.pdf](http://www.dpaw.wa.gov.au/images/documents/plants-animals/threatened-species/carnabys/Carnabys_black_cockatoo_-_species_profile_2012.pdf) (Accessed 5 December 2014).
- DEC (2012b) Fauna Profiles: Malleefowl. Department of Environment and Conservation, Perth.  
[http://www.dpaw.wa.gov.au/images/documents/conservation-management/pests-diseases/malleefowl\\_2012.pdf](http://www.dpaw.wa.gov.au/images/documents/conservation-management/pests-diseases/malleefowl_2012.pdf) (Accessed 5 December 2014).
- 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 (2013) 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. 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.
- Native Vegetation Solutions (2014) Flora and Vegetation Survey of the Proposed Blue Vein Mine - Mt Holland Operation. Unpublished report prepared for Convergent Minerals Limited.
- Western Wildlife (2014) Blue Vein Mine, Mt Holland Project. Level 1 Fauna Survey 2014. Unpublished report for Convergent Minerals Limited.

## 5. Glossary

### Acronyms:

<b>BoM</b>	Bureau of Meteorology, Australian Government
<b>CALM</b>	Department of Conservation and Land Management (now DEC), Western Australia
<b>DAFWA</b>	Department of Agriculture and Food, Western Australia
<b>DEC</b>	Department of Environment and Conservation, Western Australia
<b>DEH</b>	Department of Environment and Heritage (federal based in Canberra) previously Environment Australia
<b>DEP</b>	Department of Environment Protection (now DEC), Western Australia
<b>DIA</b>	Department of Indigenous Affairs
<b>DLI</b>	Department of Land Information, Western Australia
<b>DMP</b>	Department of Mines and Petroleum, Western Australia
<b>DoE</b>	Department of Environment (now DEC), Western Australia
<b>DoIR</b>	Department of Industry and Resources (now DMP), Western Australia
<b>DOLA</b>	Department of Land Administration, Western Australia
<b>DoW</b>	Department of Water
<b>EP Act</b>	Environmental Protection Act 1986, Western Australia
<b>EPBC Act</b>	Environment Protection and Biodiversity Conservation Act 1999 (Federal Act)
<b>GIS</b>	Geographical Information System
<b>ha</b>	Hectare (10,000 square metres)
<b>IBRA</b>	Interim Biogeographic Regionalisation for Australia
<b>IUCN</b>	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
<b>RIWI Act</b>	Rights in Water and Irrigation Act 1914, Western Australia
<b>s.17</b>	Section 17 of the Environment Protection Act 1986, Western Australia
<b>TEC</b>	Threatened Ecological Community

### 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** **Priority One - Poorly Known taxa:** 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** **Priority Two - Poorly Known taxa:** 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** **Priority Three - Poorly Known taxa:** 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** **Priority Four – Rare taxa:** 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** **Declared Rare Flora – Extant taxa (= Threatened Flora = Endangered + Vulnerable):** 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** **Declared Rare Flora - Presumed Extinct taxa:** 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** **Schedule 1 – Fauna that is rare or likely to become extinct:** being fauna that is rare or likely to become extinct, are declared to be fauna that is need of special protection.
- Schedule 2** **Schedule 2 – Fauna that is presumed to be extinct:** being fauna that is presumed to be extinct, are declared to be fauna that is need of special protection.
- Schedule 3** **Schedule 3 – Birds protected under an international agreement:** 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.