



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4313/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Central Norseman Gold Corporation

1.3. Property details

Property: Mining Lease 63/133
Mining Lease 63/15
Local Government Authority: Shire of Dundas
Colloquial name:

1.4. Application

| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of: |
|--------------------|-----------|--------------------|---------------------|
| 27.73 | | Mechanical Removal | Mineral Production |

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 9 June 2011

2. Background

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

| Vegetation Description | Clearing Description | Vegetation Condition | Comment |
|---|--|---|--|
| <p>Beard vegetation associations have been mapped at a scale of 1:250,000 for the whole of Western Australia. One Beard vegetation association is located within the application area (Shepherd, 2009):</p> <p>Beard Vegetation Association 9: Medium woodland; Coral Gum (<i>Eucalyptus torquata</i>) and Goldfields Blackbutt (<i>E. lesouefii</i>).</p> <p>A flora and vegetation survey undertaken by Mattiske during October 2004 identified five plant communities within the application area (Mattiske, 2005):</p> <p>Valley Floors and Extensive Lower Slopes</p> <p><u>Plant Community E2:</u> Open Woodland of <i>Eucalyptus lesouefii</i> – <i>E. salubris</i> – <i>E. urna</i> – <i>E. cylindrocarpa</i> over <i>Melaleuca sheathiana</i>, <i>Atriplex vesicaria</i> subsp <i>appendiculata</i>, <i>Eremophila deserti</i>, <i>E. ionantha</i>, <i>Dodonaea stenozyga</i>, <i>Senna artemisioides</i> subsp <i>filifolia</i>, <i>Sclerostegia disarticulata</i>, <i>Sclerolaena obliquicuspis</i> and <i>Atriplex nummularia</i> subsp <i>spathulata</i> on clay-loams on lower slopes and extensive flats;</p> <p><u>Plant Community E:</u> Open Woodland of <i>Eucalyptus salubris</i> – <i>E. dundasii</i> – <i>E. lesouefii</i> – <i>E. urna</i> – <i>E. salmonophloia</i> over <i>Geijera linearifolia</i>, <i>Santalum acuminatum</i>, <i>Eremophila scoparia</i>, <i>E. glabra</i>,</p> | <p>Central Norseman Gold Corporation proposes to clear 27.73 hectares in order to complete the construction a tailings storage facility for mineral production purposes located 2.7 kilometres east of Norseman (Central Norseman Gold Corporation, 2011).</p> | <p>Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994);</p> <p>to</p> <p>Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).</p> | <p>The vegetation condition of the area proposed to be cleared was described by Mattiske (2005). The vegetation condition ranged from completely degraded in previously mined and disturbed areas, to excellent (Mattiske, 2005).</p> <p>The area applied to be cleared forms part of an area of native vegetation originally approved for clearing under CPS 815/1. This clearing permit was granted by the Department of Industry and Resources (now Department of Mines and Petroleum) on 13 April 2006 and authorised the clearing of up to 87.7 hectares of native vegetation. Due to under utilisation, the operational life of the tailings storage facility was extended past the expiration date of CPS 815/1. Consequently Central Norseman Gold Corporation has applied to clear the remaining 27.73 hectares of native vegetation originally authorised under clearing permit CPS 815/1.</p> |

Exocarpus aphyllus over *Atriplex vesicaria* subsp *appendiculata*, *Frankenia cinerea*, *Scaevola spinescens*, *Olearia muelleri*, *Hemichroa diandra* and *Frankenia pauciflora* var *pauciflora* and *Halosarcia indica* subsp *bidens* on clay-loams on valley floors;

Mid to Upper Slopes

Plant Community E6: Open Woodland of *Eucalyptus lesouefii* – *E. salubris* – *E. salmonophloia* – *E. urna* – *E. dundasii* – *E. stricklandii* over *Melaleuca sheathiana*, *Eremophila glabra* subsp *glabra*, *Atriplex vesicaria* subsp *appendiculata*, *Eremophila psilocalyx*, *E. interstans* subsp *interstans*, *Pomaderris forrestiana*, *Scaevola spinescens* and *Olearia muelleri* on soils ranging from calcretes to sandy gravels on mid and upper slopes;

Outcrops - Mid and Upper Slopes (exposed rock)

Plant Community S2: Closed Heath to Tall Shrubland of *Grevillea acuaria*, *Pomaderris forrestiana*, *Eremophila interstans* subsp *interstans*, *Allocasuarina helmsii*, *A. acutivalvis* subsp *acutivalvis*, *Phlebalium fillifolium*, *Dodonaea adenophora*, *Beyeria brevifolia* var *brevipes*, *Alyxia buxifolia*, *Eremophila glabra*, *Dodonaea stenozyga* over *Acacia erinacea*, *Ptilotus obovatus* var *obovatus*, *Exocarpus aphyllus*, *Eremophila psilocalyx*, *Riciniocarpus stylosus* and *Atriplex nummularia* subsp *spathulata* with occasional emergent *Eucalyptus stricklandii* on shallow sandy-gravelly soils associated with outcropping on mid and upper slopes; and

Plant Community E10: Low Open Woodland of *Eucalyptus stricklandii* over *Eremophila psilocalyx*, *Atriplex nummularia* subsp *spathulata*, *Exocarpus aphyllus*, *Acacia dorsenna*, *Hibbertia pungens*, *Melaleuca sheathiana*, *Alyxia buxifolia*, *Allocasuarina helmsii*, *Santalum acuminatum* over *Scaevola spinescens*, *Westringia rigida*, *Dodonaea stenozyga*, *Grevillea acuaria*, *Pomaderris forrestiana*, *Olearia muelleri*, and *Acacia erinacea* with pockets of *Eucalyptus torquata*, *E. incrassata* and *E. urna* on gravelly shallow soils on fringes of heath communities on mid and upper slopes.

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 is located within the Eastern Goldfields subregion of the Coolgardie Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). One Beard vegetation association is located within the application area: Beard vegetation association 9: Medium woodland; Coral Gum (*Eucalyptus torquata*) and Goldfields Blackbutt (*E. lesouefii*). Beard vegetation association 9 retains approximately 99.8% of its pre-European vegetation extent within the Coolgardie bioregion (Shepherd, 2009).

CALM (2002) reports that the vegetation of the Eastern Goldfields comprises of Mallees, *Acacia* thickets and shrubheaths on sandplains. Diverse *Eucalyptus* woodlands occur around salt lakes, on ranges, and in valleys. Salt lakes support dwarf shrublands of samphire.

A flora survey undertaken by Mattiske (2005), which includes the application area, identified a total of 32 plant families, 63 genera and 134 plant taxa (including subspecies and varieties) within the survey area. Dominant families include *Chenopodiaceae*, *Mimosaceae*, *Myrtaceae* and *Myoporaceae*. There were two introduced weed species identified. Few annual species were recorded as a result of the timing of the survey. A total of seventeen plant communities were recorded within the survey area. None of the plant communities described in the survey area are classified as Threatened or Priority Ecological Communities and none of the plant communities recorded are regarded as regionally significant communities (Mattiske, 2005).

During the flora survey the Priority One species *Acacia dorsenna* and the Priority Three species *Eremophila purpurascens* were located within local plant communities on or adjacent to exposed outcropping on the upper slopes of hills however these areas represent a very small portion of the area applied to be cleared. The vegetation affected by this proposal is predominantly located on valley floors and on lower slopes and it is not likely that these species will be significantly impacted by the proposal (Mattiske, 2005).

No threatened fauna species were recorded during the survey (Mattiske, 2005). One reptile and one bird species listed in the Wildlife Conservation (Specially Protected Fauna) Notice 2010 (2) may occur in the survey area (Mattiske, 2005).

The area applied to be cleared forms part of an area of native vegetation originally approved for clearing under clearing permit CPS 815/1. This clearing permit was granted by the Department of Industry and Resources (now Department of Mines and Petroleum) on 13 April 2006 and authorised the clearing of up to 87.7 hectares of native vegetation. Consequently the current application area surrounds the previously approved tailings storage facility and it is therefore unlikely that the remaining native vegetation comprises a high level of biological diversity. The vegetation under application is unlikely to provide an ecological link or corridor for native fauna movement due to the adjacent tailings storage facility and the high level of existing disturbance in the area. The vegetation types and fauna habitats present within the application area are well represented in the Eastern Goldfields subregion.

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

Methodology CALM (2002)
Mattiske (2005)
Shepherd (2009)
GIS Database:
- IBRA WA (Regions – Sub Regions)
- Norseman Orthomosaic - Landgate 2009

(b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.

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

A fauna assessment of the application area was undertaken by Ninnox Consulting (Mattiske, 2005). Based on the results of the database search and literature review, a total of 136 bird species, 24 native mammal species (including eight species of bat), 10 frog and 70 reptile species could potentially occur in the five major fauna habitats of the survey area. Of the total number of species that could potentially occur, 21 species of bird, two native mammals, one reptile and five species of introduced mammal were recorded during the site assessment (Mattiske, 2005).

No threatened fauna species were recorded during the survey (Mattiske, 2005). One reptile and one bird species listed in the Wildlife Conservation (Specially Protected Fauna) Notice 2010 (2) may occur in the survey area (Mattiske, 2005) however the fauna habitats present within the application area are well represented in the Eastern Goldfields subregion (Mattiske, 2005).

The area applied to be cleared forms part of an area of native vegetation originally approved for clearing under clearing permit CPS 815/1. This clearing permit was granted by the Department of Industry and Resources (now Department of Mines and Petroleum) on 13 April 2006 and authorised the clearing of up to 87.7 hectares of native vegetation. Consequently the current application area surrounds the previously approved tailings storage facility and it is therefore unlikely that the remaining native vegetation comprises a significant habitat for fauna. The vegetation under application is unlikely to provide an ecological link or corridor for native fauna movement due to the adjacent tailings storage facility and the high level of existing disturbance in the area.

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

Methodology Mattiske (2005)

(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

There are no records of Declared Rare Flora (DRF) known to occur within the area under application (GIS Database) and a flora survey conducted by Mattiske (2005) did not identify the presence of any DRF species.

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

Methodology Mattiske (2005)

GIS Database:
- Declared Rare and Priority Flora List

(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

No known Threatened Ecological Communities (TECs) have been recorded within the area applied to be cleared (GIS Database). None of the plant communities recorded during the flora and vegetation survey are classified as TECs (Mattiske, 2005). The nearest known TEC is located approximately 73 kilometres north-east of the proposed clearing (GIS Database).

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

Methodology Mattiske (2005)

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

| | Pre-European area (ha)* | Current extent (ha)* | Remaining %* | Conservation Status** | Pre-European % in IUCN Class I-IV Reserves |
|--|-------------------------|----------------------|--------------|-----------------------|--|
| IBRA Bioregion - Coolgardie | 12,912,204 | 12,707,872 | ~98.4 | Least Concern | 10.9 |
| Beard vegetation association - State | | | | | |
| 9 | 240,509 | 239,928 | ~99.8 | Least Concern | 1.2 |
| Beard vegetation association - Bioregion | | | | | |
| 9 | 240,442 | 239,867 | ~99.8 | Least Concern | 1.3 |

*Shepherd (2009)

** Department of Natural Resources and Environment (2002)

Beard vegetation association 9 retains approximately 99.8% of its pre-European vegetation extent within the Coolgardie bioregion which is more than the 30% threshold level recommended in the National Objectives Targets for Biodiversity Conservation below which, species loss appears to accelerate exponentially at an ecosystem level (EPA, 2000).

Given that the vegetation is well represented locally and regionally the vegetation within the proposed area is not likely to be significant as a remnant in a highly cleared landscape.

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

Methodology Department of Natural Resources and Environment (2002)

EPA (2000)
Shepherd (2009)
GIS Database:
- IBRA WA (Regions – Sub Regions)

(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 at variance to this Principle

No permanent wetlands or watercourses are located within the proposed area of clearing, although there are two minor, non-perennial watercourses (drainage lines) which pass through the application area (GIS Database). These watercourses act as drainage channels into a non-perennial salt lake which is located

approximately 400 m east of the proposed clearing area.

Mattiske (2005) has identified that the vegetation growing within these drainage lines is not riparian vegetation, rather a continuation of the surrounding vegetation types (Mattiske, 2005). Analysis of aerial imagery reveals that the majority of these drainage lines are now incorporated into the previously approved tailings storage facility and only a small portion of the vegetation to be cleared is growing within drainage lines. Consequently the removal of this native vegetation is unlikely to have any significant environmental impacts on watercourses or wetlands.

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

Methodology Mattiske (2005)
GIS Database:
- Hydrography, linear
- Hydrography, lakes
- Norseman Orthomosaic - Landgate 2009

(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 vegetation of the application area is predominantly open eucalypt woodland which fringes on a non-perennial salt lake (Mattiske, 2005; GIS Database). The dominant soil types of the application area are clay loams which are associated with the open eucalypt woodlands on the valley floors and lower slopes. On the mid to upper slopes, the open eucalypt woodlands occur on soils ranging from calcretes to sandy-gravels, with shallow sandy-gravelly soils associated with outcropping (Mattiske, 2005).

The region is characterised by low average annual rainfall of approximately 300 millimetres/ year and a high evaporation rate of approximately 2300 millimetres/ year (GIS Database). The landscape of the proposed area has low topographic relief so it is unlikely that there will be excessive surface water runoff during normal seasonal rains and a minimal risk of water erosion (GIS Database). There may be a small risk of wind erosion once vegetative cover is removed however this is likely to be short term during construction of the extension to the existing tailings storage facility.

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

Methodology Mattiske (2005)
GIS Database:
- Hydrography, linear
- Evaporation Isopleths
- Mean Average Rainfall
- Topographic Contours, 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 likely to be at variance to this Principle

The nearest conservation areas to the proposed clearing are a Department of Environment and Conservation managed timber reserve, located approximately 8.5 km south of the proposal and the Dundas Nature Reserve which is located approximately 13 kilometres south-east of the proposal (GIS Database). The local area is well vegetated with the Coolgardie bioregion retaining approximately 98.4% of its pre-European extent (Shepherd, 2009) and the vegetation under application is unlikely to provide an ecological link, corridor or buffer to these conservation areas.

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

Methodology Shepherd (2009)
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 does not fall within a Public Drinking Water Source Area. A salt lake is located 400 metres east of the application area where salinity ranges between 14,000 - 35,000 milligrams/ litre Total Dissolved Solids (GIS Database). As a result, further clearing for the proposed tailings storage facility is unlikely to impact upon salinity levels in this area.

The two minor non-perennial watercourses which pass through the proposed clearing area will only flow for short periods after heavy rainfall events (GIS Database) and rainfall is unlikely to cause significant runoff as any excess water evaporates or filters to groundwater. Therefore, it is not likely that there will be any surface water quality issues associated with the clearing of native vegetation to expand the existing tailings storage

facility.

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

Methodology GIS Database:
- Public Drinking Water Source Areas
- Groundwater Salinity, Statewide
- Hydrography, linear

(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 region is characterised by low average annual rainfall of approximately 300 millimetres/ year and a high evaporation rate of approximately 2300 millimetres/ year (GIS Database). Flooding usually only occurs following extreme rainfall events, and the broad valley systems disperse and drain floodwaters into the numerous salt lakes which are scattered throughout the landscape (GIS Database). The land surrounding the proposed clearing area drains into a salt lake which would rarely fill or flood during normal seasonal rains.

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

Methodology GIS Database:
- Evaporation Isoleths
- Mean Average Rainfall
- Hydrography, linear
- Topographic Contours, Statewide

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 area under application; WC99/002 (GIS Database). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are no registered Aboriginal Sites of Significance within the application area (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 and Conservation 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 25 April 2011 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

Methodology GIS Database
- Aboriginal Sites of Significance
- Native Title Claims

4. References

- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. 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.
- EPA (2000) Environmental protection of native vegetation in Western Australia. Clearing of native vegetation, with particular reference to the agricultural area. Position Statement No. 2. December 2000. Environmental Protection Authority.
- 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 (2005). Flora, Vegetation and Vertebrate Fauna Survey on Proposed Tailings Dam Area. Prepared by Mattiske Consulting Pty Ltd & Ninox Wildlife Consulting April 2005.
- Shepherd, D.P. (2009) Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.

5. Glossary

Acronyms:

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