

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6152/1

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Phoenix Gold Limited

1.3. Property details

Property: Mining Lease 16/199

Mining Lease 16/200 Mining Lease 16/527 Shire of Coolgardie

Local Government Area:
Colloquial name:

Burgundy Project

1.4. Application

Clearing Area (ha) No. Trees Method of Clearing
160 Mechanical Remov

160 Mechanical Removal Mineral Production

1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 7 August 2014

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description Beard vegetation associations have been r

Beard vegetation associations have been mapped for the whole of Western Australia and are useful to look at vegetation in a regional context. The following Beard vegetation association is located within the application

For the purpose of:

area (GIS Database):

468: Medium woodland; salmon gum & goldfields blackbutt.

No vegetation surveys have been undertaken over the application area; therefore vegetation communities have

not been described or mapped for this area in any further detail than Beard vegetation mapping.

Clearing Description Burgundy Project.

Phoenix Gold Limited proposes to clear up to 160 hectares of native vegetation within a boundary of approximately 209 hectares for the purpose of mineral production. The project is located approximately 35

kilometres north, north-west of Coolgardie within the Shire of Coolgardie.

Vegetation Condition Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate

(Keighery, 1994);

То

Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).

Comment The purpose of the application is to mine the Burgundy Prospect. The proposed clearing will be undertaken for

open pits, waste rock landforms, run of mine pad, haul roads, low grade stockpiles, workshop, administration

buildings and contractors laydown area.

The vegetation condition has been inferred from orthophotos, a nearby clearing permit and land uses in the area including exploration activities and grazing.

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 Goldfield subregion of the Coolgardie Interim Biogeographic Regionalisation for Australia (IBRA) bioregion (GIS Database). This subregion is characterised by gently undulating plains interrupted in the west with low hills and a series of large playa lakes in the western half (CALM, 2002). The vegetation is dominated by Mallees, *Acacia* thickets and shrub-heaths on sandplains, diverse Eucalyptus woodlands occur around salt lakes, on ranges, and in valleys, and dwarf shrublands of samphire around salt lakes (CALM, 2002).

Flora and vegetation surveys have not been undertaken over the application area. According to available databases, there are no known records of Threatened Flora or Priority Flora species, Threatened Ecological Communities or Priority Ecological Communities within the application area (GIS Database). According to Naturemap, one Priority 3 Flora species has been recorded within a 10 kilometre radius of the approximate centrepoint of the application area (DPaW, 2014).

A flora and vegetation survey has been undertaken from approximately 1 kilometre west of the application area for Phoenix Gold Limited's Castle Hill Mine site. This survey was conducted by Botanica Consulting (Botanica) on 6 and 7 November 2012 and 27 and 28 August and 20 September 2013 and included a survey area of 1,700.5 hectares (Botanica, 2013). A total of 114 flora species (including sub-species and variants) from 59 genera and 30 families were recorded by Botanica (2013). No Threatened or Priority Flora or PECs or TECs were recorded by Botanica (2013). According to Botanica (2013), vegetation identified within the survey area is not considered to be of high biological diversity, and is well represented outside of the proposed impact area.

Seven weed species were identified by Botanica (2013). Care must be taken to ensure that the proposed clearing activities do not spread or introduce weed species to non-infested areas. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

No flora and vegetation surveys have been conducted over the application area. Botanica (2013) identified three Priority Flora species that have the potential to occur within the nearby Castle Hill area. Phoenix Gold Limited (Phoenix) (2014) states that a flora survey will be conducted for the Burgundy Project in spring 2014. Potential impacts to Threatened or Priority Flora species as a result of the proposed clearing may be minimised by the implementation of a flora management condition.

A Level 1 vertebrate fauna survey conducted for the nearby Castle Hill Mine site recorded a total of 35 native fauna species and three introduced species (Harewood, 2013b). Fauna habitats identified during this survey were considered common and widespread in the region and the faunal assemblage identified as potentially present was considered unlikely to be different to that found in similar habitats elsewhere in the general area (Harewood, 2013b).

A review of aerial imagery indicates vegetation and fauna habitats within the application area are likely to be similar to those identified in the flora and fauna surveys conducted for the Castle Hill Mine site (GIS Database). Aerial imagery also shows the surrounding area is largely uncleared with widespread availability of similar vegetation communities and landforms (GIS Database). Considering the above, it is unlikely the application area comprises a higher level of biological diversity than surrounding areas.

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

Methodology

Botanica (2013) CALM (2002) DPaW (2014) Harewood (2013b) Phoenix (2014) GIS Database:

- IBRA WA (Regions Sub Regions)
- Kalgoorlie 50cm Orthomosaic Landgate 2006
- Threatened and Priority Flora
- Threatened Ecological Sites Buffered

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

Comments

Proposal may be at variance to this Principle

A Level 1 vertebrate fauna survey was undertaken for the Castle Hill Mine site, located approximately 3 kilometres west of the application area. This survey was undertaken by Greg Harewood (Harewood) and included a desktop study and a site reconnaissance survey on 7 January 2013 (Harewood, 2013b). While the fauna survey did not cover the application area, it was undertaken over a nearby area so the results are considered applicable.

A total of 12 broad scale fauna habitat types were identified by Harewood (2013b) and were based on the vegetation communities identified during Botanica's flora and vegetation survey. According to Harewood (2013b), the fauna habitats present are common and widespread in the region and are therefore not of high ecological significance. The potential faunal assemblage identified is also considered unlikely to be different to that found in similar habitats elsewhere in the wider area (Harewood, 2013b).

Opportunistic observations made during the site reconnaissance survey recorded a total of 35 native fauna species and three introduced species (Harewood, 2013b). One conservation significant species, the Rainbow Bee-eater (*Merops ornatus*) (Marine; Migratory under *EPBC Act*; Schedule 3), was observed. Harewood (2013b) also considered the Peregrine Falcon (*Falco peregrinus*) (Vulnerable; Schedule 4), Australian Bustard (*Ardeotis australis*) (Priority 4) and Central Long-eared Bat (*Nyctophilus major*) (Priority 4) as possibly utilising

the survey area. Aerial imagery indicates fauna habitats within the application area are likely to be similar to those in the survey area (GIS Database). The abovementioned species may therefore utilise the application area, however, these species are considered relatively wide ranging and/or will persist in adjoining unaffected areas (Harewood, 2013b).

A search of the online website Naturemap also shows Malleefowl (*Leipoa ocellata*) (Vulnerable; Schedule 1) has been recorded within 5 kilometres of the approximate centre point of the application area (DPaW, 2014). This occurrence was recorded on 10 November 2009 in tall shrubland (DPaW, 2014). The Malleefowl occurs in semi-arid and arid zones of temperate Australia, where it occupies shrublands and low woodlands that are dominated by mallee vegetation (Department of the Environment, 2014). Harewood (2013b) states this species may occur occasionally as transient individuals but does not list it as a potential species within the survey area. However, given the Malleefowl has been recorded within 5 kilometres, there is the possibility that the application area supports the Malleefowl. Phoenix (2014) states that a fauna survey will be undertaken in spring 2014. Potential impacts to the Malleefowl as a result of the proposed clearing may be minimised by the implementation of a fauna management condition.

A desktop invertebrate assessment was also conducted by Harewood for the Castle Hill Mine site (Harewood, 2013a). The likelihood of short range endemics (SRE) was assessed as a low probability based on the lack of previous records in the area and the apparent lack of typical habitats that often contain SRE species (Harewood, 2013a). Harewood (2013a) also noted that similar terrestrial habitats are widespread in the area so if present it is unlikely that any species are restricted to the survey area. Stygofauna and troglofauna were also assessed as having a low probability of occurrence within the survey area. The geology is not considered favourable and there are no obvious restrictions to dispersal (Harewood, 2013a). Harewood (2013a) adds that subterranean geological units are widespread in the area.

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

Methodology Department of the Environment (2014)

DPaW (2014) Harewood (2013a) Harewood (2013b) Phoenix (2014) GIS Database:

- Kalgoorlie 50cm Orthomosaic - Landgate 2006

(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 known records of Threatened Flora species within the application area (GIS Database). A search of the online website Naturemap shows no Threatened Flora species have been recorded within 20 kilometres of the application area (DPaW, 2014). No Threatened Flora species were recorded or considered likely to occur by Botanica (2013) in the nearby Castle Hill Mine site. Based on the above, it is unlikely the application area supports Threatened Flora, however, no flora and vegetation surveys have been conducted over the application area. Potential impacts to Threatened Flora as a result of the proposed clearing may be minimised by the implementation of a flora management condition.

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

Methodology Botanica (2013)

DPaW (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 known Threatened Ecological Communities within the application area or within 200 kilometres of the application area (GIS Database).

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

Methodology 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 is located within the Coolgardie Interim Biogeographical Regionalisation for Australia

(IBRA) bioregion (GIS Database). Approximately 97.96% of the pre-European vegetation remains within the Coolgardie bioregion (Government of Western Australia, 2013).

The vegetation of the application area has been mapped as Beard vegetation association 468 (GIS Database). Over 98% of this Beard vegetation association remains at both a state and bioregional level (Government of Western Australia, 2013). Therefore, the area proposed to be cleared does not represent a significant remnant of native vegetation within an area that has been extensively cleared. A review of aerial imagery also shows that vegetation within the application area is not a remnant within the local area (GIS Database).

| | Pre-European area (ha)* | Current extent (ha)* | Remaining %* | Conservation Status** | Current Extent % in DPaW Managed Lands* |
|---|----------------------------|----------------------|--------------|--------------------------|---|
| IBRA Bioregion - Coolgardie | 12,912,204 | 12,648,491 | ~97.96 | Least Concern | ~15.84 |
| Beard vegetation associations - State | | | | | |
| 468 | 592,022 | 583,903 | ~98.63 | Least Concern | ~23.15 |
| Beard vegetation associations - Bioregion | | | | | |
| 468 | 583,358 | 575,361 | ~98.63 | Least Concern | ~22.72 |

^{*} Government of Western Australia (2013)

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 Sub Regions)
- Kalgoorlie 50cm Orthomosaic Landgate 2006
- 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 may be at variance to this Principle

There are no permanent wetlands or watercourses within the application area, however, there are three minor, non perennial watercourses that intersect the application area (GIS Database). Available databases show that numerous minor drainage lines occur in the local area (GIS Database). According to Phoenix (2014), surface water flows within this area are small and catchments are ephemeral and only hold water during high rainfall events for a short period of time.

Aerial imagery indicates vegetation may grow in association with one of the minor, non perennial watercourses. Phoenix (2014) states that clearing within drainage lines will be minimised, and the clearing of large vegetation will be avoided where possible. Potential impacts to watercourses within the application area may be minimised by the implementation of a watercourse management condition.

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

Methodology

Phoenix (2014)

GIS Database:

- Hydrography, linear
- Kalgoorlie 50cm Orthomosaic Landgate 2006

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

Comments

Proposal may be at variance to this Principle

The application area lies within the Coolgardie bioregion (GIS Database), on Yilgarn Craton's 'Eastern Goldfields Terrains' (CALM, 2002). Landforms of the Coolgardie bioregion include granite rocky outcrops, low greenstone hills, laterite uplands and broad plains (Bastin, G., and the ACRIS Management Committee, 2008). According to Phoenix (2014), the deposit lies on a sparsely vegetated area with mainly saltbush and bluebush over the deposit as well as some Eucalyptus and *Acacia* species to the south where the soil cover is thicker. Available databases indicate the application area is relatively flat (GIS Database) and the area experiences a low annual rainfall with Coolgardie recording an annual average rainfall of 270.3 millimetres (BoM, 2014).

The Department of Agriculture of Western Australia (DAWA) (now Department of Agriculture and Food) provided advice on nearby clearing permit CPS 462/2 (approximately 2 kilometres west of the application area).

^{**} Department of Natural Resources and Environment (2002)

According to the decision report for CPS 462/2, DAWA (2005) (cited in DEC, 2006) considered some of the vegetation communities as slightly prone to erosion if the vegetation or drainage is disturbed. Based on this and the large size of the proposed clearing (160 hectares), there is the potential for land degradation to occur. Potential impacts from erosion may be minimised by the implementation of a staged clearing condition and a watercourse management condition.

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

Methodology Bastin, G., and the ACRIS Management Committee (2008)

BoM (2014) CALM (2002) DEC (2006) Phoenix (2014) GIS Database:

- IBRA WA (Regions Sub Regions)
- 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 application area does not lie within any conservation areas or Department of Parks and Wildlife (DPAW) managed lands (GIS Database). The nearest conservation area is the former Credo pastoral lease located approximately 22 kilometres north west of the application area (GIS Database). This former lease is proposed for conservation and managed by DPAW. Based on the distance between the application area and the former pastoral lease, the proposed clearing is not likely to impact the environmental values of any 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

According to available databases, the application area is not located within a Public Drinking Water Source Area (GIS Database). There are no permanent waterbodies or watercourses within the application area, however, there are three minor non perennial watercourses (GIS Database). Clearing in the vicinity of these may result in localised erosion and sedimentation, particularly following heavy seasonal rainfall. Potential impacts to the surface water quality as a result of the proposed clearing may be minimised by the implementation of a staged clearing condition and a watercourse management condition.

The climate of the area is arid to semi-arid with 200 to 300 millimetres of rainfall that usually occurs in winter but sometimes occurs in summer (CALM, 2002). The application area receives an average annual rainfall of approximately 270.3 millimetres with an average annual evaporation rate of 2,800 millimetres (BoM, 2014; GIS Database). Any surface flows are therefore likely to be short lived.

Groundwater salinity in the local area is estimated to be between 14,000 - 35,000 milligrams/Litre Total Dissolved Solids (TDS), which is considered saline (GIS Database). The proposed clearing is not likely to significantly alter groundwater salinity levels within the application area.

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

Methodology BoM (2014)

CALM (2002) GIS Database:

- Evaporation Isopleths
- Groundwater Salinity, Statewide
- Hydrography, linear
- Public Drinking Water Source Areas (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

The application area is located within the Raeside-Ponton catchment area (GIS Database). Given the size of the area to be cleared (160 hectares) in relation to the size of the catchment area (11,589,533 hectares) (GIS Database), the proposed clearing is not likely to increase the potential of flooding on a local or catchment scale.

With an average annual rainfall of approximately 270.3 millimetres and an average annual evaporation rate of 2,800 millimetres there is likely to be little surface flow during normal seasonal rains (BoM, 2014; GIS Database). Whilst large rainfall events may result in flooding of the area, the proposed clearing is not likely to lead to an increase in incidence or intensity of flooding.

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

Methodology BoM (2014)

GIS Database:

- Evaporation Isopleths
- Hydrographic Catchments Catchments

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

Comments

There is one native title claim over the area under application: WC2013/009 (GIS Database). This claim has been filed at the federal court 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*.

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, the Department of Parks and Wildlife and the Department of Water, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

The clearing permit application was advertised on 30 June 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 Filed at the Federal Court

4. References

- Bastin, G., and the ACRIS Management Committee (2008) Rangelands 2008 Taking the Pulse; Coolgardie Bioregion. Published on behalf of the Australian Collaborative Rangeland Information System (ACRIS) Management Committee by the National Land and Water Resources Audit, Canberra.
- BoM (2014) Climate Statistics for Australian Locations. A Search for Climate Statistics for Coolgardie, Australian Government Bureau of Meteorology, viewed July 2014, http://www.bom.gov.au/climate/averages/tables/cw 012018.shtml>.
- Botanica (2013) Level 2 Flora & Vegetation Survey for the Castle Hill Project Tenement: P16/1961, P16/2419, P16/2426, P16/2428, M16/22, M16/24, M16/40, M16/43, M16/152, M16/179, M16/189, M16/195, M16/198, M16/526, P16/141, P16/2577, M16/141, M16/183, M16/248, M16/354, P16/2430 & P16/2432. Draft 1. Unpublished report prepared by Botanica Consulting for Phoenix Gold Limited dated September 2013.
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Department of Conservation and Land Management.
- DEC (2006) Clearing Permit Decision Report for CPS 462/2. Prepared by the Department of Environment and Conservation, 3 March 2006.
- 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
- Department of the Environment (2014) Leipoa ocellata Malleefowl. URL: http://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=934, viewed July 2014. Department of the Environment.
- DPaW (2014) NatureMap Mapping Western Australia Biodiversity, Department of Environment and Conservation. http://naturemap.dec.wa.gov.au/default.aspx, viewed July 2014.
- 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.
- Harewood (2013a) Desktop Invertebrate Assessment of the Castle Hill, Red Dam and Kintore Project Areas. Unpublished report prepared by Greg Harewood for Phoenix Gold Limited dated April 2013.
- Harewood (2013b) Terrestrial Fauna Assessment (Level 1) of Castle Hill Project Area. Version 3. Unpublished report prepared by Greg Harewood for Phoenix Gold Limited dated October 2013.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Phoenix (2014) Supporting Information for Clearing Permit Application Burgundy. Unpublished report prepared by Phoenix Gold Limited dated June 2014.

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:

P2

{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.

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 — 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 — 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.

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)

EXExtinct: 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.