Department of
Industry and Resources

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 387/1

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Crescent Gold Limited**

1.3. Property details

Property: M38/143
M38/318
L38/53

Local Government Area: Shire Of Laverton

Colloquial name: Euro Deposit

1.4. Application

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

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Beard vegetation association 18: Low woodland; Mulga (*Acacia aneura*). (Hopkins et al. 2001, Shepherd et al. 2001)	The proposed clearing consists of 50.8 ha for the development of the Euro gold deposit. The purpose of the clearing is to establish an open pit, waste rock dump and associated mine site infrastructure (i.e haul roads, laydown areas). It is proposed the topsoil be stripped and stored separately and vegetation stockpiled for later respreading on rehabilitated areas (MBS Environmental 2004). A vegetation and fauna assessment was undertaken within the Euro project area by MBS Environmental between 1 and 3 September 2004 (MBS Environmental, 2004). The vegetation to be cleared is characterised by Mulga shrubland with an understorey including; *Ptilotus obovatus, Senna artemisioides* subsp. *filifolia, Eremophila latrobei* subsp. *latrobei, Acacia ramulosa* var. *ramulosa, Erodium crinitum* and *Halgoris gossei*. Several annuals including *Helipterum craspediodes, Erodium crinitum* and *Halgoris gossei* were noted in the mulga interpatches (MBS Environmental 2004).	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	Photographs of the area show the vegetation structure to be excellent to very good, although, the area has been previously disturbed by historic mining activity. Several patches of the weed species *Acetosa vesicaria* were observed on old workings throughout the site. The vegetation assessment was conducted at the level of reconnaissance survey as specified in EPA Guideline 51, targeting the areas of remnant vegetation across the Euro project area (MBS Environmental 2004). The site was traversed by foot and samples were collected of unknown flora for identification. Vegetation assessment of the area was sufficient to ascertain the condition and vegetation association. Assessment points were selected at random across the project landscape.

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 Euro project mine area is located within the Eastern Murchison Interim Biogeographical Regionalisation for Australia subregion within which the vegetation type is widespread (GIS database). Almost 100 % of the pre-European vegetation remains within this subregion (Shepherd et al., 2001). The area under proposal is already disturbed by historic mining activities with exploration evident in the form of pads, sumps and vehicle tracks (MBS Environmental 2004).

Vegetation condition at the Euro project area has been described as very good to excellent with vegetation structure intact (Keighery 1994). The area under application is located within the Mt Weld pastoral lease which is covered by a single pre-European Beard vegetation association 18, Low woodland; Mulga (*Acacia aneura*), which covers over 817,000 ha (GIS database). The vegetation units described for the project area broadly reflect those mapped by Beard, and are common and widespread throughout the North Eastern Goldfields (MBS Environmental 2004; GIS database).

No Priority or Declared Rare Flora, Threatened Ecological Communities or Threatened Fauna were noted across the Euro project area (GIS database; MBS Environmental 2004). Several patches of the weed species *Acetosa vesicaria* were noted on old workings throughout the area (MBS Environmental 2004).

The Euro site is unlikely to show higher diversity than the surrounding bioregion or local area, therefore, the proposed clearing is unlikely to be at variance to this principle.

Methodology

Shepherd et al. (2001)
MBS Environmental (2004)
Keighery (1994)
GIS Databases:
- Pre-European Vegetation - DA 01/01
- Declared Rare and Priority Flora List - CALM 01/07/05
- Pastoral Leases -DOLA 10/01
- Threatened Fauna - CALM 30/9/05
- Threatened Ecological Communities - CALM 12/4/05

(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 habitat and fauna survey was conducted between 1 and 3 September 2004, with the habitat assessment conducted at the level of reconnaissance survey (MBS Environmental 2004). Landforms such as ranges, ridges or caves, which provide significant habitat for fauna, were not recorded within the proposed area. Mulga shrubland is the primary fauna habitat in the area to be cleared, and is well represented in the surrounding region. CALM (2005) have advised that based on the results of the vegetation and habitat assessment, disturbances proposed for the Euro project area are unlikely to have adverse impacts on fauna of conservation significance.

Several species of fauna of varying conservation significance may occur within the project area. The Vulnerable Great Desert Skink (*Egernia kintorei*) was trapped in 1967 and may persist in the region (CALM Fauna Database 2004). However, the vegetation of the Euro site is characterised by Mulga habitat and not the sandplain vegetated by spinifex and scattered shrubs that characterise the habitat type for the Great Desert Skink (McAlpin 2001), therefore, it is unlikely to be present.

Two bird species of conservation significance are considered to potentially utilise the habitat of the project area. The Schedule 2 listed Peregrine Falcon (*Falco peregrinus*) and the Australian Bustard (*Ardeotis australias*), listed as a Priority 4 species, have been observed in the project area (MBS Environmental 2004). Given that the Mulga shrubland vegetation unit of the project area is well represented in the Northern Goldfields, it is unlikely that localised clearing will affect the habitat and distribution of these species, and that of other bird species which may utilise the area.

Migratory birds which may utilise the area include three threatened species listed under the *Environmental Protection and Biodiversity Conservation Act* 1999. These species are the Oriental Dotterel (*Charadrius veredus*), Rainbow Bee-eater (*Merops ornatus*) and the Great Egret (*Ardea alba*). The proposed area is not the birds primary habitat and they may disperse throughout the project area at different times of the year. Due to the localised area applied to be cleared, the development is unlikely to impact on key breeding and feeding habitat for any migratory species (MBS Environmental 2004).

Five amphibian species; Cyclorana *maini, Cylorana platycephala, Limnodynastes spenceri, Neobatrachus*

kunapalari and *Neobatrachus suto*, which are of no conservation significance, are expected to occur in the area, however, these species are generally arid-adapted species that are opportunistic after rains (MBS Environmental 2004). Climatic conditions were not favourable for their presence during the site visit and they were not observed. Two drainage lines are evident near the Euro site, one approximately 500m north-east of the project site, and the second approximately 400m south-west of the project site (GIS database). It is most likely these species would be observed in these watercourses after substantial rainfall, therefore, they should be avoided during the clearing phase of the project.

One mammal species, the Mulgara (*Dasycercus cristicaudata*), is listed as Vulnerable under the *Environmental Protection and Biodiversity Conservation Act* 1999 and WA *Wildlife Conservation Act* 1950 and may potentially occur across the project area (MBS Environmental 2004). The habitat requirements of the Mulgara are clayey sand and sandy loam soils with spinifex cover between 10 - 60%. Spinifex habitat was not present on the project area, thus the likelihood of Mulgara occurring in the area is low.

The nearest known threatened fauna habitat is located approximately 5 km north of the proposed area and should not be impacted by this proposal (CALM 2005).

It is unlikely that the localised clearing at this site for the proposed purposes will impact on native fauna habitat, therefore, the proposal is not likely to be at variance to this principle.

Methodology CALM (2005)
CALM Fauna Database (2004)
MBS Environmental (2004)
McAlpin (2001)

(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 CALM datasets, there are no known records of Declared Rare or Priority Flora within the proposed area of clearing (GIS database).

MBS Environmental conducted a search of CALMs Threatened Flora database and the Western Australian Herbarium Specimen (WAHERB) database between the coordinates 28° 22'-28° 55'S and 122° 14'-122° 41'E to identify rare and priority species which may be found within the Euro project area. Subsequently, MBS Environmental conducted a vegetation assessment in the form of a reconnaissance survey between 1 and 3 September 2004 and found no Declared Rare or Priority Flora species within the Euro Project area (MBS Environmental 2004). The Priority 1 species (*Phyllanthus baeckeoides*) was recorded during the survey near the Sickle Deposit, although this site is approximately 14km north-east of the proposed clearing.

CALM (2005) have advised that based on the results of the vegetation and habitat assessment, disturbances proposed for the Euro project area are unlikely to have adverse impacts on flora of conservation significance.

With consideration to the above, this proposal is not likely to be at variance to this principle.

Methodology MBS Environmental (2004)
CALM (2005)
GIS Database:
- Declared Rare and Priority Flora List - CALM 13/08/03

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

Comments **Proposal is not likely to be at variance to this Principle**
There are no known Threatened Ecological Communities (TECs) identified within the area subject to be cleared. The nearest known TEC is approximately 240 km north-west of the proposed area (GIS database). The clearing proposal is not likely to be at variance to this principle.

Methodology GIS databases: -
- Threatened Ecological Communities - CALM 12/4/05

(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 State Government is committed to the National Objectives Targets for Biodiversity Conservation which includes a target that prevents clearance of ecological communities with an extent below 30% of that present pre-European settlement (Department of Natural Resources and Environment, 2002; EPA, 2000).

While the benchmark of 15% representation in conservation reserves (JANIS Forests Criteria 1997) has not been

met for Beard vegetation association 18, approximately 99.9% of the pre-European extent remains for this association and it is therefore of 'least concern' for biodiversity conservation (Department of Natural Resources and Environment, 2002).

	Pre-European area (ha)	Current extent (ha)	Remaining %*	Conservation Status**	% in IUCN Class I-IV reserves
IBRA Bioregion - Murchison	28,206,195*	28,206,195*	~100%	Least concern	
Shire of Laverton	No information available				
Beard vegetation associations - 18	24,675,970	24,659,110	~99.9%	Least concern	2.0%

* Shepherd et al. (2001)
** Department of Natural Resources and Environment (2002)

Methodology
Department of Natural Resources and Environment (2002)
JANIS Forests Criteria (1997)
EPA (2000)
Hopkins et al. (2001)
Shepherd et al. (2001)

(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 watercourses or wetlands within the proposed clearing area for the mine site development (MBS Environmental 2004). The nearest watercourse is approximately 400m south-west from the proposed clearing, while a second is located approximately 200m north-east from the area (GIS database). Several minor, non-perennial watercourses exist around the site, however, these are widespread across the landscape and are unlikely to be impacted on by the proposed clearing. Lake Carey is situated approximately 14 km south-west of the project area, however, considering the distance separating the project area from any major watercourses or wetlands the proposed clearing is unlikely to have a significant impact on these areas.

The proposed haul road crosses six minor, non-perennial watercourses that flow from south-east to north-west. These remain dry for most of the year and act as a drainage channels during significant rainfall events (GIS database). Average annual rainfall in the Euro project area is low (approximately 250-300 mm/yr), however, the area is subject to sporadic, heavy rainfall (GIS database). During these events, the Northern Goldfields is often susceptible to flood events. Soil erosion and surface water runoff may be exacerbated in and around the watercourses if native vegetation is cleared during heavy rainfall events.

DAWA (2005) advise that loss of vegetation can also occur where the natural sheet flow regimes are interrupted by roads and other earthworks, however, this is a land use issue associated with the haul road and it will be managed under the Mining Proposal process in accordance with the *Mining Act* 1978.

The clearing of native vegetation for the proposed development may be at variance to this principle because of issues associated with erosion at the time of clearing. This issue will be managed through a condition on the clearing permit, which will prevent clearing prior to, or during heavy rainfall events.

Methodology
MBS Environmental (2004)
GIS Database:
- Rivers, 1M - GA 01/06/00
- Rivers 250K - GA
- Lakes, 1M - GA 01/06/00
- Hydrography, linear - DOE 1/2/04
- Evaporation Isopleths - BOM 09/98
- Mean Annual Rainfall Isohyets (1975-2003) - DOE 09/05

(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 topography of the Laverton region is characterised by gently undulating terrain of low relief, with prominent hills consisting of greenstone outcrops. The soils are typically red loams that are loose and friable, with a few small ironstone quartz pebbles overlying a siliceous hardpan (Beard 1974). The Euro Deposit straddles the Bevan and Gundockerta land systems and these are described as; low ironstone hills, with stoney lower slopes supporting mulga shrubland and undulating calcareous stoney plains supporting bluebush shrublands. These land systems are susceptible to soil erosion especially on the duplex soils on breakaway footslopes, and on the lower alluvial soils and drainage lines where the protective cover is disturbed and surface water is not controlled

(DAWA 2005). The clearing of native vegetation at this site for mine development purposes, is likely to cause land degradation in the form of soil erosion if adequate precautions are not made. There is potential for erosion to occur at the time of clearing if the site were to be exposed to a heavy rainfall event or high winds, and a condition that prevents clearing prior to, or during heavy rainfall events will be imposed on the permit to reduce the likelihood of this occurring.

The proposed haul road is planned to transverse two land systems, Nublev and Jundee. For half of its total length, the road will run on a hard pan plain with an ironstone gravel mantle that supports mulga shrublands. This land system is prone to erode where the protective gravel mantle is disturbed, or flows are concentrated (DAWA 2005). DAWA advice on this principle is that this activity will cause appreciable land degradation as the rocky mantle will be disturbed. Heavy rainfall at the time of clearing may result in increased surface water runoff and erosion occurring in areas where the haul road crosses the non-perennial watercourses.

Loss of perennial native vegetation can occur where natural sheet flow regimes are interrupted by roads and other networks (DAWA 2005). It is recommended consideration be given to future haul road design and construction to avoid these risks. However, as this issue is associated with the land use activity and not the clearing, it will be managed under the Mining Proposal process in accordance with the *Mining Act* 1978.

The area has previously been disturbed by historic and more recent mining activities, and evidence exists in the form of pads, sumps and vehicle tracks. Several patches of the weed species *Acetosa vesicaria* were also observed on old workings throughout the site (MBS Environmental 2004).

In consideration of the above issues, the proposal may be at variance to this principle with respect to soil erosion at the time of clearing.

Methodology Beard (1974)
DAWA (2005)
MBS Environmental (2004)

(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**
There are no CALM managed conservation areas within the area proposed to be cleared. The nearest conservation area is located approximately 120km south-west of the proposed area to be cleared (GIS database). Considering the distance from the nearest conservation area, the proposal is not likely to be at variance to this principle.

Methodology GIS database:-
- CALM Managed Lands and Waters - CALM 1/06/04_1

(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 may be at variance to this Principle**
The proposed area of clearing is approximately 5km down slope from the Laverton Public Drinking Water Source Area, therefore, the clearing will not impact the Laverton Public Drinking Water Source Area (GIS database). Typically, the groundwater is slightly acidic and fresh-brackish, with salinity ranging from 830 - 1900 mg/L Total Dissolved Solids, and pH ranging between 6.3 - 6.7 (Rockwater Pty Ltd 2004 cited in MBS Environmental 2004b). Depth to groundwater in the Euro project area is around 60 metres, with the evaporation rate between 3200-3400 mm/yr and average rainfall between 250-300 mm/yr. Rainfall usually occurs in sporadic, heavy events (MBS Environmental 2004; GIS database). Given the size of the clearing in relation to the surrounding area, the clearing of native vegetation is unlikely to have a significant impact on infiltration rates, and given the depth to groundwater it is unlikely to affect groundwater quality.

The proposed area to be cleared does not intercept any major watercourses, therefore, is not likely to affect drainage into Lake Carey (GIS database). However, there are several minor, non-perennial watercourses that occur within the clearing area for the proposed haul road, which act as drainage lines during significant rainfall events (GIS database). Heavy rainfall at the time of clearing could result in erosion and increased turbidity in these watercourses, which may cause deterioration in the quality of surface water.

Considering depth to groundwater, the low average rainfall and high evaporation rate of the area, the clearing of native vegetation is unlikely to cause deterioration in the quality of underground water. The proposal may be at variance to this principle with respect to impacts on surface water quality, and this will be managed through a condition on the clearing permit which prevents clearing prior to, or during heavy rainfall events.

Methodology Rockwater Pty Ltd (2004)
MBS Environmental (2004)
MBS Environmental (2004b)
GIS Databases:

- Public Drinking Water Source Areas (PDWSAs) - DOE 28/4/05
- 250K Map Series, Hydrogeology - WRC 05/08/02
- Evaporation Isopleths - BOM 09/98
- Mean Annual Rainfall Isohyets (1975-2003) - DOE 09/05

(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

There are no wetlands or perennial watercourses within the proposed disturbance area, although there are several minor, non-perennial watercourses which cross the proposed haul road (MBS Environmental 2004; GIS database). The Euro deposit area experiences low average annual rainfall (250-300 mm/yr) and high evaporation (3200-3400 mm/yr), however, the area is subject to sporadic heavy rainfall events. During significant rainfall events, the area is often subject to flooding. The watercourses in question are widespread across the Northern Goldfields and are responsible for dispersing floodwaters. The area to be cleared is small relative to the extent of the surrounding vegetation, and is therefore unlikely to form a catchment area sufficiently large enough to cause or increase the incidence of flooding. Consequently, it is unlikely that the proposal is at variance to this principle.

Methodology

MBS Environmental (2004)
GIS Databases:
- Rivers 250K - GA
- Lakes, 1M - GA 01/06/00_1
- Evaporation Isopleths - BOM 09/98
- Mean Annual Rainfall Isohyets (1975-2003) - DOE 09/05

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

Comments

There is a current native title claim over the area under application; WC99/001. This claim has been registered with the National Native Title Tribunal on behalf of the Wongatha claimant group. However, the mining tenement has been granted in accordance with the future act regime of the *Native Title Act* 1993 and the nature of the act (ie. 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.

The proposed clearing occurs in an area that is covered by the following Registered Indigenous Heritage Sites - Lawsons Well, ID: 18630. It is the proponent's responsibility to comply with the *Aboriginal Heritage Act* 1972 and ensure that no Sites of Aboriginal Significance are damaged through the clearing process.

The proponent does not have a current EP Licence or works approval for this project (DoE 2005).

The proponent does not have a current ground or surface water licence for this project (DoE 2005).

The Shire of Laverton has no objection to the proposal (Shire of Laverton 2005).

Methodology

Shire of Laverton (2005)
DoE (2005)
GIS Databases:
- Aboriginal Sites of Significance - DIA 28/02/03
- Native Title Claims - DLI 7/11/05

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Mineral Production	Mechanical Removal	50.8	Grant	All the Principles have been addressed and the proposed clearing is either not or not likely to be at variance with clearing principles a, b, c, d, e, h and j. The clearing may be at variance with principle (f) and (i) since the proposed haul road crosses several non-perennial watercourses, which may be prone to erosion if the site is exposed to a heavy rainfall event. The clearing may also be at variance with principle (g) as DAWA has provided advice that the disturbance of the stoney mantle for the proposed land uses may cause land degradation due to the susceptibility of the land system to erosion. The assessing officer advises that the permit be granted.

The following conditions apply to the permit.

1) The Permit Holder shall not clear native vegetation within the area cross-hatched yellow on Plan 387/1 whilst it is raining.

2) The Permit Holder shall construct and maintain a culvert or floodway where the haul road crosses a drainage line.

3) The Permit Holder shall inspect each culvert or floodway constructed in accordance with condition 2 following rainfall events causing surface water runoff or monthly, if rainfall events do not occur. If erosion is observed, the permit holder shall construct silt fences and/ or sediment traps downstream of the erosion.

5. References

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6. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government.
CALM	Department of Conservation and Land Management, Western Australia.
DAWA	Department of Agriculture, Western Australia.
DA	Department of Agriculture, Western Australia.
DEH	Department of Environment and Heritage (federal based in Canberra) previously Environment Australia
DEP	Department of Environment Protection (now DoE), Western Australia.
DIA	Department of Indigenous Affairs
DLI	Department of Land Information, Western Australia.
DoE	Department of Environment, Western Australia.

DoIR	Department of Industry and Resources, Western Australia.
DOLA	Department of Land Administration, Western Australia.
EP Act	Environment Protection Act 1986, Western Australia.
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Federal Act)
GIS	Geographical Information System.
IBRA	Interim Biogeographic Regionalisation for Australia.
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
RIWI	Rights in Water and Irrigation Act 1914, Western Australia.
s.17	Section 17 of the Environment Protection Act 1986, Western Australia.
TECs	Threatened Ecological Communities.

Definitions:

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

P1	**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.