Government of **Western Australia**
Department of **Mines and Petroleum**

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 3873/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Robe River Mining Co Pty Ltd**

1.3. Property details

Property: Section 91 Licence 20109/2007_4_204 under the *Land Administration Act 1997*
Iron Ore (Robe River) Agreement Act 1964
Local Government Area: Shire of Roebourne
Colloquial name: Cape Lambert Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
22		Mechanical Removal	Expansion of existing accomodation camp

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 16 December 2010

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 mapped at a 1:250,000 scale for the whole of Western Australia. One Beard vegetation association has been mapped within the application area (GIS Database; Shepherd, 2007):

157: Hummock grasslands, grass steppe; hard spinifex, *Triodia wiseana* (GIS Database; Shepherd, 2007).

The application area was surveyed by Western Botanical staff on 17-19 May 2008, 16 June 2008 and 10 August 2008 (Western Botanical, 2008a; Western Botanical, 2008b). The following vegetation types were identified within the application area.

Sandy Alluvial Plains

AsAtAstTe: *Acacia sabulosa* and *Acacia tumida* var. *pilbarensis* high open shrubland, over *Acacia stellaticeps* low open shrubland, over *Triodia epactia* and occasionally *Triodia schinzii* open hummock grassland;

AsaAcTeCc: *Acacia sabulosa, Acacia coriacea* subsp. *coriacea* open shrubland, over *Triodia epactia* very open hummock grassland and *Cenchrus ciliaris* very open tussock grassland;

AstTe: *Acacia stellaticeps* low open shrubland, over *Triodia epactia* open hummock grassland;

AtTs: *Acacia tumida* var. *pilbarensis* very open shrubland, over *Triodia schinzii* open hummock grassland;
AtGpAcCc: *Acacia trudgeniana, Grevillea pyramidalis* subsp. *leucadendron* and *Acacia coriacea* subsp. *coriacea* tall open shrubland, over *Cenchrus ciliaris* open tussock grassland;

AstTs: *Acacia stellaticeps* low open shrubland, over *Triodia schinzii* hummock grassland, on sandy alluvial plain;

AaCc: *Acacia ampliceps* high open shrubland, over *Cenchrus ciliaris* tussock grassland, *Acacia ampliceps* high open shrubland, over *Cenchrus ciliaris* tussock grassland;

AcoAcTe: *Acacia colei* var. *colei* and *Acacia coriacea* subsp. *coriacea* high open shrubland, over *Triodia epactia* open hummock grassland on a sandy alluvial plain;

AcoGpAcCc: *Acacia colei* var. *colei, Grevillea pyramidalis* subsp. *leucadendron* and *Acacia coriacea* subsp. *coriacea* high open shrubland, over *Cenchrus ciliaris* tussock grassland on a sandy alluvial plain;

AsAcTeCc: *Acacia sabulosa* and *Acacia coriacea* subsp. *coriacea* open shrubland, over *Triodia epactia* very open hummock grassland and *Cenchrus ciliaris* very open tussock grassland on a sandy alluvial plain;

AsAstTeCc: *Acacia sabulosa* open shrubland, over *Acacia stellaticeps* low open shrubland, over *Triodia epactia* very open hummock grassland and *Cenchrus ciliaris* open tussock grassland on a sandy alluvial plain;

GpTe: *Grevillea pyramidalis* subsp. *leucadendron* scattered shrubs, over *Triodia epactia* hummock grassland n a sandy alluvial plain;

GwTe: *Grevillea wickhamii* high open shrubland, over *Santalum lanceolatum* open shrubland, over *Triodia epactia* hummock grassland on a sandy alluvial plain;

TeTs: Trio*dia epactia* and *Triodia schinzii* hummock grassland on a sandy alluvial plain;

Silty Alluvial Plains

AtGpAstCcTe: *Acacia trudgeniana, Acacia bivenosa* and *Grevillea pyramidalis* subsp. *leucadendron* scattered shrubs, over *Acacia stellaticeps* low scattered shrubs, over *Cenchrus ciliaris* tussock grassland, with *Triodia epactia* very open hummock grassland;

Te: *Triodia epactia* hummock grassland on a silty alluvial plain;

Rocky Hills

AiTe: *Acacia inaequilatera* scattered shrubs, over *Triodia epactia* hummock grassland on rocky hills;

AiTw: *Acacia inaequilatera* scattered shrubs, over *Triodia wiseana* hummock grassland on rocky hills;

GpTw: *Grevillea pyramidalis* subsp. *leucadendron scattered* shrubs over *Triodia wiseana* hummock grassland;

AtrTe: *Acacia trudgeniana* scattered shrubs, over *Triodia epactia* hummock grassland;

Tw: *Triodia wiseana* open hummock grassland, occasionally with Ac*acia bivenosa, Acacia inaequilatera* or *Grevillea pyramidalis* subsp. *leucadendron* scattered shrubs on rocky hills (Western Botanical, 2008a; Western Botanical, 2008b).

Clearing Description

The applicant has applied to clear up to 22 hectares of native vegetation within a 28.6 hectare area for the purpose of expanding the existing Cape Lambert Camp. The proposed works will include the construction of 1,200 bed camp as well as associated infrastructure (water pipeline, tanks).

Vegetation will be cleared by a dozer with the blade down. Cleared vegetation will be stockpiled and used in rehabilitation.

Vegetation Condition

Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).

Comment

The application is located in the Pilbara region, approximately 3 kilometres west of Point Samson (GIS database). The vegetation condition was derived from a vegetation survey conducted by Western Botanical (2008).

3. Assessment of application against clearing principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments

Proposal is not likely to be at variance to this Principle

The application area occurs within the Chichester (PIL1) sub-region of the Pilbara Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). This sub-region is characterised by plains supporting a shrub steppe characterised by *Acacia inaequilatera* over *Triodia wiseana* (formerly *Triodia pungens*) hummock grasslands, while *Eucalyptus leucophloia* tree steppes occur on ranges (CALM, 2002).

Two broad habitat types were recorded as occurring within the application area;
Open *Acacia* or *Grevillea* shrublands over *Triodia wiseana* or *Triodia epactia* hummock grasses on stony hills; and
Open shrublands of mainly *Acacia* species over soft spinifex (*Triodia epactia* and/or *Triodia schinzii*) hummock grasses or mixed tussock grasses on sandy or silty alluvial plains (Western Botanical, 2008a; Western Botanical, 2008b).

The broad fauna assemblages of the application area are very much intact and representative of a natural ecosystem. The fauna habitats that occur within the proposed impact footprint clearly also occur beyond the impact footprint.

Seven alien weed species were recorded within the application area (Western Botanical, 2008a; Western Botanical, 2008b). These were: Buffel Grass (*Cenchrus ciliaris*), Birdwood Grass (*Cenchrus setigerus*), Summer Grass (*Digitaria ciliaris*), Kapok Bush (*Aerva javanica*), Mimosa Bush (*Vachellia farnesiana*), Verano Stylo (*Stylosanthes hamata*), and Common Sowthistle (*Sonchus oleraceus*) (Western Botanical, 2008a; Western Botanical, 2008b). Weeds have the potential to alter the biodiversity of an area, competing with native vegetation for available resources and making areas more fire prone. This in turn can lead to greater rates of infestation and further loss of biodiversity if the area is subject to repeated fires. None of these species are listed as 'Declared Plant' species under the *Agriculture and Related Resources Protection Act 1976* by the Department of Agriculture and Food. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

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

Methodology CALM (2002)
Western Botanical (2008a)
Western Botanical (2008b)
GIS Database:
- IBRA WA (regions - subregions)

(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**
According to Shepherd (2007) approximately 99.95% of the pre-European vegetation remains within the Pilbara bioregion. Given the extent of native vegetation remaining in the local area and bioregion, the vegetation to be cleared does not represent a significant ecological linkage.

Two main fauna habitats were described by Western Botanical (2008a; Western Botanical, 2008b) as occurring within the application area:

1. Open *Acacia* or *Grevillea* shrublands over *Triodia wiseana* or *Triodia epactia* hummock grasses on stony hills; and
2. Open shrublands of mainly *Acacia* species over soft spinifex (*Triodia epactia* and/or *Triodia schinzii*) hummock grasses or mixed tussock grasses on sandy or silty alluvial plains (Western Botanical, 2008a; Western Botanical, 2008b).

Fauna habitat within the application area has experienced historical disturbance from the existing camp and waste water treatment plant spray fields. The clearing of 22 hectares within an area which has suffered previous disturbance is unlikely to result in a loss of significant habitat for fauna indigenous to Western Australia.

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

Methodology Shepherd (2007)
Western Botanical (2008a)
Western Botanical (2008b)

(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 GIS databases there are no known records of Declared Rare Flora (DRF) within the application area (GIS Database).

A flora survey was conducted over the application area by staff from Western Botanical on 17-19 May 2008, 16 June 2008 and 10 August 2008 (Western Botanical, 2008a; Western Botanical, 2008b). No DRF species were recorded within the application area (Western Botanical, 2008a; Western Botanical, 2008b).

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

Methodology Western Botanical (2008a)
Western Botanical (2008b)
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**
A search of available databases reveals that there are no Threatened Ecological Communities (TECs) within the application area or within a 150 kilometre radius (GIS Database). At this distance there is little likelihood of any impact to a TEC from the proposed clearing.

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 falls within the Pilbara IBRA bioregion (GIS Database). Shepherd (2007) reports that

approximately 99.95% of the pre-European vegetation remains in this bioregion.

The vegetation within the application area is recorded as Beard vegetation association:
157: Hummock grasslands, grass steppe; hard spinifex, *Triodia wiseana* (GIS Database; Shepherd, 2007).

According to Shepherd (2007) approximately 100% of these Beard Vegetation Associations remain within the Pilbara bioregion (see table below).

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in IUCN Class I-IV Reserves
IBRA Bioregion - Pilbara	17,804,188	17,794,647	~99.95%	Least Concern	~6.32%
Beard vegetation associations - State					
157	502,729	501,514	~99.8%	Least Concern	~17.9%
Beard vegetation associations - Bioregion					
157	198,633	198,518	~99.9%	Least Concern	~5.7%

* Shepherd (2007)
** Department of Natural Resources and Environment (2002)

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

Methodology Department of Natural Resources and Environment (2002)
Shepherd (2007)
GIS Database:
- IBRA WA (regions - subregions)
- Pre-European Vegetation

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

Comments

Proposal is not likely to be at variance to this Principle

According to available GIS Databases, there are no permanent wetlands or watercourses within the application area (GIS Database). However there are two minor ephemeral watercourses within the application area as well as mangroves directly adjacent to the east of the application area and a saline coastal flat to the south-east (GIS Database).

Based on vegetation mapping conducted by Western Botanical (2008a; 2008b) none of the twenty-one vegetation associations found within the application area are associated with drainage areas.

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

Methodology Western Botanical (2008a)
Western Botanical (2008b)
GIS Database:
- Hydrography, Linear
- Geodata, Lakes

(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 has been surveyed by the Department of Agriculture and Food (Van Vreeswyk et al., 2004), and is comprised of the Cheerawarra, Littoral and Rocklea land systems (GIS Database).

The Cheerawarra land system is described as sandy coastal plains and saline clay plains supporting soft and hard spinifex grasslands and minor tussock grasslands (Van Vreeswyk et al., 2004). Most of the land units within this land system are highly susceptible to wind erosion if the vegetative cover is depleted (Van Vreeswyk et al., 2004).

The Littoral land system is described as bare coastal mudflats with mangroves on seaward fringes, samphire flats, sandy islands, coastal dunes and beaches (Van Vreeswyk et al., 2004). The coastal dunes of this land system are highly susceptible to wind erosion if plant cover is lost (Van Vreeswyk et al., 2004).

The Rocklea land system is described as basalt hills, plateaux, lower slopes and minor stony plains supporting hard spinifex (and occasionally soft spinifex) grasslands (Van Vreeswyk et al., 2004). This land system is not susceptible to erosion (Van Vreeswyk et al., 2004).

Based on the above, the proposed clearing may be at variance to this Principle. Potential land degradation impacts as a result of the proposed clearing may be minimised by the implementation of a rehabilitation condition.

Methodology Van Vreeswyk et al (2004)
GIS Database:
- Rangeland Land System Mapping

(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 proposed clearing is not located within a conservation reserve (GIS Database). According to available databases there are no known conservation reserves within a 30 kilometre radius 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:
- 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 (PDWSA) (GIS Database). The nearest PDWSA is the Roebourne Water Reserve which is located approximately 14 kilometres south of the application area. Given the distance separating the application area and the Roebourne Water Reserve, the proposed clearing is unlikely to impact on the water quality of the Roebourne Water Reserve.

The application area is located within a *Rights in Water and Irrigation Act 1914* (RIWI Act) Groundwater Management Area (GIS Database). The proponent is required to obtain permits to abstract groundwater in this area.

The groundwater salinity within the application area is approximately 1,000 - 3,000 milligrams/Litre Total Dissolved Solids (TDS) (GIS Database). Given the size of the area to be cleared (22 hectares) compared to the size of the Pilbara Groundwater Province (5,557,665 hectares) (GIS Database), the proposed clearing is not likely to cause salinity levels within the application area to alter significantly.

There are no permanent or semi-permanent water bodies or watercourses within the application area (GIS Database). The application area is located in a semi-desert-tropical region (CALM, 2002). With an average annual rainfall of approximately 310.2 millimetres and an annual pan evaporation rate of 3,200 millimetres/year recorded from the nearest weather station at Roebourne approximately 13 kilometres south of the application area (BoM, 2010), there is little surface flow during normal seasonal rains. The proposed clearing is not likely to cause the quality of surface water to deteriorate.

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

Methodology BoM (2010)
CALM (2002)
GIS Database:
- Groundwater - Provinces
- Groundwater Salinity
- Hydrography, Linear
- Public Drinking Water Source Areas (PDWSA)
- RIWI Act, Groundwater Areas

(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 experiences a semi-desert, tropical climate with an average annual rainfall of 310.2 millimetres (CALM, 2002; BoM, 2010). Rainfall is usually experienced during summer months and can be either cyclonic or thunderstorm events (CALM, 2002). It is likely that during times of intense rainfall there may be some localised flooding in adjacent areas. Local flooding occurs seasonally within the Pilbara region as a result

of cyclonic activity and sporadic thunderstorm events. The proposed clearing of 22 hectares for the purpose of expanding an existing accommodation camp, is unlikely to exacerbate or increase the incidence or intensity of flooding within the application area and surrounding areas.

The application area is located within the Coastal catchment area (GIS Database). However, the size of the area to be cleared (22 hectares) in relation to the size of the Coastal catchment area (744,302 hectares) (GIS Database) is not likely to increase the potential for flooding within the application area, local area or within the catchment (GIS Database).

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

Methodology BoM (2010)
CALM (2002)
GIS Database:
- Hydrographic Catchments - Catchments

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

Comments

There is one native title claim (WC99/14) over the area under application (GIS Database). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. However, the 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 two registered Aboriginal sites of significance within the application area (ID_570 and ID_571) (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 16 August 2010 by the Department of Mines and Petroleum inviting submissions from the public. One submission was received stating no objection to the proposed clearing.

Methodology GIS Database:
- Aboriginal Sites of Significance
- Native Title NNTT

4. References

Biota Environmental Sciences (2008) Cape Lambert Port B Developmental Seasonal Fauna Survey. Prepared for Pilbara Iron Pty Ltd. Unpublished report dated July 2008.

BoM (2010) BOM Website - Climate Averages by Number, Averages for ROEBOURNE. www.bom.gov.au/climate/averages/tables/cw_004035.shtml (Accessed 5 October 2010).

CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Pilbara 1 (PIL1 - Chichester subregion) 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.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Shepherd, D.P. (2007) 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.

Western Botanical (2008a) Flora, Vegetation and Fauna Assessment of the Additional Cape Lambert Camp: Native Vegetation Clearing Permit Report. Prepared for Pilbara Iron Pty Ltd. Unpublished report dated June 2008.

Western Botanical (2008b) Cape Lambert Operations, Camp Infrastructure: Native Vegetation Clearing Permit Report. Prepared for Pilbara Iron Pty Ltd. Unpublished report dated September 2008.

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.