



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6258/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Silver Lake (Integra) Pty Ltd

1.3. Property details

Property: General Purpose Lease 25/2
Miscellaneous Licence 25/33
Mining Lease 25/307
Local Government Area: City of Kalgoorlie-Boulder
Colloquial name: Lucky Bay Project

1.4. Application

| | | | |
|--------------------|-----------|--------------------|---|
| Clearing Area (ha) | No. Trees | Method of Clearing | For the purpose of: |
| 97 | | Mechanical Removal | Mineral Production, Haul Road and Associated Infrastructure |

1.5. Decision on application

Decision on Permit Application: [Redacted]
Decision Date: [Redacted]

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 for the whole of Western Australia. Three Beard vegetation associations are located within the application area (GIS Database):

Beard vegetation association 468: Medium woodland; salmon gum & goldfields blackbutt;

Beard vegetation association 508: Succulent steppe with open scrub; scattered mulga over saltbush; and

Beard vegetation association 676: Succulent steppe; samphire (GIS Database).

Two flora and vegetation surveys were undertaken over the application area by Botanica Consulting (2010; 2011). Botanica Consulting (2010) conducted a level 1 flora and vegetation surveyed the haul road section of the application area during 8 November 2010 and the remainder of the application area was subject to a level 2 flora and vegetation surveyed by Botanica Consulting (2011) on 5 April and during 8 and 9 November 2011. The surveys identified 11 vegetation communities within the application area:

- 1 - *Casuarina pauper* over *Cratystylis conocephala* shrubland,
- 2 - *Eucalyptus oleosa* woodland over *Cratystylis conocephala*,
- 3 - *Eucalyptus horistes* Mallee woodland over *Eremophila caperata*,
- 4 - *Eucalyptus salmonophloia* woodland over *Cratystylis conocephala*,
- 5 - *Eucalyptus griffithsii* woodland;
- 6 - *Casuarina pauper* over *Maireana sedifolia* shrubland.
- 7 - *Tecticornia* shrubland;
- 8 - *Eucalyptus salmonophloia* woodland over *Cratystylis conocephala*;
- 9 - *Eucalyptus horistes* Mallee woodland over *Eremophila caperata*;
- 10 - *Callitris columellaris* shrubland; and
- 11 - *Eucalyptus platycorys* Mallee woodland over *Triodia scariosa*.

Clearing Description Lucky Bay Project.
Silver Lake (Integra) Pty Ltd proposes to clear up to 97 hectares of native vegetation within a total boundary of approximately 117.7 hectares, for the purposes of mineral production, haul road and associated infrastructure. The project is located approximately 35 kilometres west of Kambalda, in the City of Kalgoorlie-Boulder.

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

Comment The clearing of native vegetation is for the Lucky Bay project which includes the mining and construction of an open pit, waste rock dump, ROM, laydown and administration area, topsoil stockpile and a haul road.

3. Assessment of application against clearing principles

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

Comments

Proposal is not likely to be at variance to this Principle

The application area is located within the Eastern Goldfields subregion of the Coolgardie Interim Biogeographic Regionalisation 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).

Two flora and vegetation surveys were undertaken over the application area by Botanica Consulting (2010; 2011). Botanica Consulting (2010) surveyed the haul road section of the application area during 8 November 2010, surveying 6 vegetation communities. The remainder of the application area was surveyed by Botanica Consulting (2011) on 5 April and during 8 and 9 November 2011, surveying five broad vegetation communities. Vegetation was found to be in a 'good' condition (Keighery, 1994) by both surveys, and disturbances were in the form of historical drilling, tracks and heavy grazing by goats. The vegetation was considered typical of that in the Goldfields and is well represented outside the application area (Botanica Consulting, 2010; 2011).

A total of 100 flora species from 60 genera and 33 families were recorded within the survey area (Botanica Consulting, 2010; 2011). Botanica Consulting (2010; 2011) did not identify any Threatened or Priority Flora species within the application area and no vegetation associations were consistent with Threatened or Priority Ecological Communities within the application area (GIS Database). Species composition and vegetation communities are typical of the area and not considered to be unusually diverse (Botanica Consulting, 2010; 2011).

The fauna habitat present is well represented throughout the Goldfields region, and the application area is not likely to have a higher level of faunal diversity than surrounding areas (GIS Database).

There were several weed species identified within the flora and vegetation surveys (Botanica Consulting, 2010; 2011). Weeds have the potential to significantly change the dynamics of a natural ecosystem and lower the biodiversity of an area. Potential impacts to the 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

Botanica Consulting (2010)
Botanica Consulting (2011)
CALM (2002)
Keighery (1994)
GIS Database:
- IBRA WA (Regions - Subregions)
- Mount Belches 50cm Orthomosaic - Landgate 2005
- Pre-European vegetation
- 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 is not likely to be at variance to this Principle

There has been no fauna survey conducted over the application area. However, a vertebrate fauna survey was conducted by Outback Ecology (2009) approximately 3 kilometres north of the application area and fauna habitat types within the application area are expected to be similar to the survey area.

The sites surveyed were degraded due to extensive grazing pressure from feral goats. The habitat present within the application area is considered to be widespread within the region (Outback Ecology, 2009).

Based on habitat type and previous fauna surveys in the local area, the following species of conservation significance listed as either threatened species under the *Environment Protection and Biodiversity Conservation Act* (EPBC) 1999 or protected under Western Australian legislation (*Wildlife Conservation Act 1950* (WC)) are likely to occur in the application area (DPaW, 2014; Outback Ecology, 2009):

- Rainbow Bee-eater (*Merops ornatus*) (EPBC Act – Migratory species; JAMBA, CAMBA);
- White-browed Babbler (*Pomatostomus superciliosus ashbyi*) (DPaW - Priority 4); and
- Western Rosella (*Platycercus icterotis xanthogenys*) (DPaW - Priority 4).

The Rainbow Bee-eater is found across most of Australia and inhabits open forests and woodlands, shrublands and various cleared or semi-cleared habitats (DoE, 2014). Given this species migratory habits and large distribution, the application area is not likely to represent significant habitat for the Rainbow Bee-eater.

The White Browed Babbler is found mainly in the arid and semi-arid zones south of the Tropic of Capricorn (Johnstone and Storr, 2004). It usually inhabits the edges of most types of thicket and scrub, including mulga, wattle and other Acacia thickets, and shrubby understorey of Eucalypt and Casuarina woodlands (Johnstone and Storr, 2004). The Western Rosella is found in the semi-arid southern interior (Johnstone and Storr, 2004). It occurs mainly in Eucalypt and Casuarina woodland and scrubs, especially Wandoo and Salmon Gum woodlands (Johnstone and Storr, 2004). Given the mobility of these species and that the habitat in the application area is well represented within the region, the proposed clearing is not likely to represent significant habitat for the White Browed Babbler or Western Rosella.

Given that the habitat present is well represented throughout the region and the application area has suffered degradation from feral grazing, the application area is not likely to represent significant habitat for native fauna species.

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

Methodology DPaW (2014)
DoE (2014)
Johnstone and Storr (2004)
Outback Ecology (2009a)

(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 within the application area (GIS Database). A search of the Department of Parks and Wildlife's Threatened and Priority Flora databases identified no Threatened Flora species as occurring within a 10 kilometre radius of the application area (DPaW, 2014).

Based on flora and vegetation surveys conducted by Botanica Consulting (2010; 2011), no Threatened Flora species were recorded within the application area.

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

Methodology Botanica Consulting (2010)
Botanica Consulting (2011)
DPaW (2014)
GIS Database
- Threatened 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 the available databases shows that there are no Threatened Ecological Communities situated within 100 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 falls within the Coolgardie IBRA bioregion (GIS Database). The vegetation within the application area is recorded as:

Beard vegetation association 468: Medium woodland; salmon gum & goldfields blackbutt;

Beard vegetation association 508: Succulent steppe with open scrub; scattered mulga over saltbush; and

Beard vegetation association 676: Succulent steppe; samphire (GIS Database).

According to the Government of Western Australia (2013), Beard vegetation associations 468, 508 and 676 retain above 95% of their pre-European extent. The local area has not been extensively cleared, and the area proposed to be cleared is not a significant remnant of native vegetation.

| | Pre-European area (ha)* | Current extent (ha)* | Remaining %* | Conservation Status** | Pre-European % in DPaW Managed Land |
|---|-------------------------|----------------------|--------------|-----------------------|-------------------------------------|
| IBRA Bioregion - Coolgardie | 12,912,204 | 12,648,491 | ~97.96 | Least Concern | 10.88 |
| Beard vegetation associations - State | | | | | |
| 468 | 592,022 | 583,903 | ~98.63 | Least Concern | 4.11 |
| 508 | 60,042 | 60,042 | ~100 | Least Concern | 12.87 |
| 676 | 2,063,414 | 1,963,895 | ~95.18 | Least Concern | 3.59 |
| Beard vegetation associations - Bioregion | | | | | |
| 468 | 583,358 | 575,361 | ~98.63 | Least Concern | 4.11 |
| 508 | 18,551 | 18,551 | ~100 | Least Concern | 41.21 |
| 676 | 117,074 | 117,057 | ~99.99 | Least Concern | - |

* Government of Western Australia (2013)

** Department of Natural Resources and Environment (2002)

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

Methodology Department of Natural Resources and Environment (2002)
Government of Western Australia (2013)
GIS Database:
- IBRA WA (regions - subregions)
- Pre-European Vegetation

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

Comments Proposal is at variance to this Principle

The application area fringes on Lake Randall, a salt lake, which is characterised as low lying and vegetation free except for at the shores (Botanica Consulting, 2011). The shore line vegetation is dominated by Samphires which appear to have preferred zones with some species found growing only a few centimetres above the lake margins, being periodically inundated, and others on Aeolian plateau or on dunes. The Aeolian based dunes around the lake fringe occur up to 10 metre relief; the dominant vegetation is a mixture of the shrubs *Tecticomia*, *Frankenia* and *Darwinia* sp. (Botanica Consulting, 2011). The *Tecticomia* shrubland vegetation community situated at the edge of Lake Randall is considered to be riparian. This vegetation community is well represented along Lake Randall, as well as the shore lines of the nearby Greater Lake Lefroy area (Botanica Consulting, 2011). The proposed clearing of approximately 1 kilometre along the shoreline of Lake Randall, which extends over 25,946 hectares (GIS Database), is not likely to have a detrimental impact on the riparian vegetation community. However this vegetation community is very difficult to rehabilitate (Botanica Consulting, 2011). Potential impacts to riparian vegetation may be minimised through the implementation of a vegetation management condition.

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

Methodology Botanica Consulting (2011)
GIS Database:
- Geodata, Lakes

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

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

The application area is located within the Kambalda Soil-Landscape Zone (Tille, 2006). This zone is characterised by flat to undulating plains (with hills, ranges and some salt lakes and stony plains) on greenstone and granitic rocks of the Yilgarn Craton (Tille, 2006).

Soils within the application area have been described as being sandy and appear to be well drained (Outback Ecology, 2009). The clearing of 97 hectares is likely to increase erosion, particularly in the vicinity of Lake Randall. Potential impacts from erosion as a result of the proposed clearing may be minimised by the

implementation of a soil erosion management condition.

The application area has an annual evaporation rate of over eight times the average annual rainfall (GIS Database). Based on this information, recharge to the groundwater would be expected to be minimal. The soils within the application area are generally saline to extremely saline due to their proximity to the salt lake, Lake Randall (Outback Ecology, 2009). Given this, the proposed clearing is not likely to result in changes to salinity within the application area.

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

Methodology Outback Ecology (2009)
Tille (2006)
GIS Database
- Evaporation Isopleths
- Rainfall, Mean Annual

(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 is not located within any conservation area (GIS Database). The nearest conservation area is Randell Timber Reserve, located approximately 10 kilometres northeast of the application area (GIS Database).

Given the distance of the application area from Randell Timber Reserve, the proposed clearing is not likely to provide a significant ecological linkage or fauna movement corridor and is not likely to impact the environmental values of the conservation area.

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

Methodology GIS Database:
- DEC Tenure

(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

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

The application area is partially situated within Lake Randall which is an a salina salt lake with heavy crusting over much of the lake surface and is subject to inundation (Botanica Consulting, 2011; GIS Database). The proposed clearing of 97 hectares of native vegetation is unlikely to result in any significant impact to Lake Randall provided disturbance to riparian habitats is avoided or minimised where possible.

The application area has a groundwater salinity that is hypersaline (>35,000 milligrams/Litre Total Dissolved solids (TDS)) (GIS Database). With high annual evaporation rates and low annual rainfall, there is little recharge into regional groundwater. The proposed clearing is unlikely to further deteriorate the quality of underground water (GIS Database).

The application area is not located within a Public Drinking Water Source Area (GIS Database).

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

Methodology Botanica Consulting (2011)
GIS Database:
- Geodata, Lakes
- Groundwater Salinity, Statewide
- Hydrography, Linear
- Public Drinking Water Source Areas
- 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 an arid to semi-arid climate, with an annual average rainfall of approximately 300 to 400 millimetres per year (CALM, 2002). Based on an average annual evaporation rate of 2,400 - 2,800 millimetres (BoM, 2014), any surface water resulting from rainfall events is likely to be relatively short lived.

Given the location of part of the application area within the Lake Randall salt lake, and the size of the area to be cleared (97 hectares) compared to the size of the Lake Lefroy catchment area (2,488,250 hectares) (GIS

Database) it is not likely that the proposed clearing will lead to an appreciable increase in run off, and subsequently cause or exacerbate the 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)
CALM (2002)
GIS Database:
- 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 (GIS Database). The claim WC1999/030 has been registered with the National Native Title Tribunal on behalf of the claimant group. However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

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

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

The clearing permit application was advertised on 15 September 2014 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

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

4. References

- BoM (2014) Climate Statistics for Australian Locations. A Search for Climate Statistics for Kambalda West, Australian Government Bureau of Meteorology, Viewed 24 October 2014, <<http://www.bom.gov.au/climate/data/>>.
- Botanica Consulting (2010) Integra Mining Lucky Bay - Level 1 Flora and Vegetation Survey, Tenements M25/307, M25/347, E25/162 & L25/31. Prepared for Integra Mining Ltd, December 2010.
- Botanica Consulting (2011) Integra Mining Lucky Bay - Level 2 Flora and Vegetation Survey, Tenement M25/307. Prepared for Integra Mining Ltd, April 2011.
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Coolgardie3 (COO3 - Hamersley 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.
- Department of Parks and Wildlife (DPaW) (2014) NatureMap Department of Parks and Wildlife, viewed 24 October 2014 <<http://naturemap.dec.wa.gov.au>>.
- DoE (2014) *Merops ornatus* - Rainbow Bee-eater. Available online at http://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=670. Accessed 27 October 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.
- Johnstone and Storr (2004) Handbook of Birds of Western Australia Vol. II, Western Australian Museum, Perth.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Outback Ecology (2009a) Terrestrial Vertebrate Fauna Assessment. Unpublished report for Integra Mining Limited by Outback Ecology Services, dated January 2009.
- Outback Ecology (2009b) Salt Creek Level 2 and Maxwells/Cock-Eyed Bob Level 1 Vegetation and Flora Surveys. Unpublished report for Integra Mining Limited by Outback Ecology Services, dated April 2009.
- Tille, P (2006) Soil-landscapes of Western Australia's Rangelands and Arid Interior. Technical Report 313. Department of Agriculture and Food, Western Australia. ISSN 1039-7205.

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.