

## **Clearing Permit Decision Report**

## 1. Application details

1.1. Permit application details

Permit application No.: 2196/1

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Sally Malay Exploration Pty Ltd

1.3. Property details

Property: E80/2360

Local Government Area: Shire Of Halls Creek

Colloquial name: Corkwood Exploration Project

1.4. Application

Clearing Area (ha) No. Trees Method of Clearing For the purpose of: 0.34 Mechanical Removal Mineral Exploration

## 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 1:250,000 scale for the whole of Western Australia, and are a useful tool to examine the vegetation extent in a regional context. One Beard vegetation association is located within the area proposed to be cleared (GIS Database, 2007). This vegetation association is described as Beard Vegetation Association 808: Grasslands, curly spinifex, low tree savanna; snappy gum over curly spinifex.

A flora desktop survey of the application area was completed in November 2007 by MBS Environmental. According to the desktop survey the vegetation of the application area is comprised of:

Scattered trees consist mainly of *Eucalyptus brevifolia* and occasional *E. dichromopholia* and *E. terminalis*. Ground cover consists of hummock grasses including *Triodia intermedia*, *T. inutilius* and *T. wiseana* depending on lithology (MBS Environmental, 2007).

#### **Clearing Description**

Sally Malay Exploration Pty Ltd propose to clear up to 0.34ha of vegetation within a 108ha purpose permit boundary, for exploration purposes, primarily for the installation of tracks and drill pads (MBS Environmental, 2007). The proposed drill pads will be 15m x 18m in diameter, while the proposed track will be 4m wide and approximately 500m

#### **Vegetation Condition**

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994)

#### Comment

The application area has been historically disturbed from bushfires, previous exploration activities and pastoral grazing (MBS Environmental, 2007). An existing access track and grid lines will be used to access the area so disturbance to vegetation will be reduced, while clearing will be undertaken with a raised blade to minimise disturbance to soil (MBS Environmental, 2007).

## 3. Assessment of application against clearing principles

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

#### Comments

The area proposed to be cleared is located approximately 130km north east of Halls Creek within the Central Kimberley Hart Interim Bioregional Regionalisation of Australia (IBRA) Subregion (GIS Database). The major land uses of the subregion are listed as grazing of native pastures and Unallocated Crown Land and Crown reserves (Graham, 2001).

The centres of endemism within the subregion are limited to a small number of rainforest patches in the northern section of the subregion, which are particularly important to invertebrates such as Camaenid land snails and annelids (Graham, 2001). However, none of the centres of endemism or ecosystems at risk listed as occurring in the subregion are found within the application area.

A desktop flora and fauna survey of the application area was completed by MBS Environmental (2007). No species of flora or fauna of conservation significance were identified as occurring within the application area.

The application area is located on the Mabel Downs Pastoral station (GIS Database), and has been degraded

from grazing activities (MBS Environmental, 2007). According to MBS Environmental (2007), a bushfire passed through the application area in October 2007 which resulted in widespread disturbance. This was verified in the photos provided by MBS Environmental (2007). There are also numerous weed species present in the application area. Based on the level of disturbance present at the site, it is unlikely that the vegetation within the application area has outstanding biodiversity values when compared to other vegetation found both locally or regionally.

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

#### Methodology Graham (2001).

MBS Environmental (2007).

GIS Databases:

Interim Biogeographic Regionalisation of Australia - EA 18/10/00

Interim Biogeographic Regionalisation of Australia (subregions) - EA 18/10/00

Pastoral Leases

## (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 desktop search of the application area was completed by MBS Environmental in December 2007. This involved a search of the Department of Environment and Conservation's (DEC) Threatened Fauna database to gather information relevant to which species of conservation significance have previously been recorded with or proximate to the area under application (MBS Environmental, 2007).

As a result of the desktop survey there were a number of conservation significant species which potentially could be found in the application area (MBS Environmental, 2007). These include the Bilby (*Macrotis lagotis*), Gouldian Finch (*Erythrura gouldiae*), Peregrine falcon (*Falco peregrinus*), *Lerista bunglebungle*, Rock Ringtail Possum (*Petropseudes dahli*), Grey Falcon (*Falco hypoleucos*), Australian Bustard (*Ardeotis australis*), Chestnut-backed Button-quail (*Turnix castanotus*), Bushstone Curlew (*Burhinus grallarius*) and Pictorella Mannikin (*Lonchura pectoralis*).

Of the species mentioned above the most likely to be found within the application area based on habitat preferences would be the Australian Bustard.

The Australian Bustard (listed as Priority 4 by the DEC), is found in tussock grasslands, Triodia hummock grassland, grassy woodland and low shrublands (Garnett and Crowley, 2000). Its habitat is limited to the arid areas of Northern and Central Australia (Garnett and Crowley, 2000). Given that some of the habitats of the Australian Bustard are found within the application area, it is possible that this species may be present. However, based on the degraded state of habitat present, it is unlikely that the application area is significant habitat for the Australian Bustard (MBS Environmental, 2007).

MBS Environmental (2007) submitted a number of photographs as part of the desktop flora and fauna survey. These photographs detailed the state of the habitats present within the application area. The photographs show that the habitat within the application area was composed of Spinifex type vegetation with scattered *Eucalyptus* trees, over soils with mantles of few to very abundant grit and pebbles of granite. It is possible that some of the Eucalyptus may provide habitat to fauna in the form of hollows. The *Eucalyptus* trees mentioned are likely to be *Eucalyptus brevifolia* and possibly *Eucalyptus dichromopholia* or *Eucalyptus terminalis* (MBS Environmental, 2007). However, SME has agreed to avoid clearing any Eucalypt species within the application area. As a result It is recommended that should the permit be granted, conditions be placed on the permit to prevent any clearing of *Eucalyptus* species within the application area.

The photographs reveal the state of habitat present to be degraded and most of the proposed drill sites were devoid of any vegetation, which is likely to be a result of recent bushfires and pastoral grazing (MBS Environmental, 2007). Based on the information above, the application area is unlikely to be a significant area of habitat for fauna species in the local or regional area.

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

#### Methodology

Garnett and Crowley (2000). MBS Environmental (2007)

## (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

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

There are no Declared Rare Flora (DRF) or Priority Flora species known to occur in the application area (GIS Database). The nearest known Priority Flora species to the application area was found approximately 25km to the east.

A desktop survey of the application area was completed by MBS Environmental (2007). During the survey the following databases were searched: Threatened Flora Database, Western Australian Herbarium, Declared Rare Flora and Priority Flora Database and the Threatened Ecological Communities database. No Declared Rare Flora or Priority Flora species were identified as occurring within the application area from the desktop survey. Due to the large distance between the application area and the nearest recorded priority flora species, there is unlikely to be any impact on known DRF or Priority species as a result of this proposal.

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

#### Methodology MBS Environmental (2007).

GIS Database:

Declared Rare and Priority Flora List - CALM 01/07/05

## (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 (TEC's) within the application area (GIS Database). The nearest known TEC is the Organic Mound Spring Sedge Land Community of the Northern Kimberley IBRA Bioregion found approximately 210km to the north west of the application area (GIS Database). The desktop flora survey conducted by MBS Environmental (2007) did not identify any significant ecological communities within the application area.

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

## Methodology MBS Environmental (2007).

GIS Database:

Threatened Ecological Communities - CALM

## (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 lies within the Central Kimberley IBRA Bioregion (GIS Database). According to Shepherd (2001), approximately, 100% of pre-European vegetation remains in the Bioregion. The vegetation of the application area is described as Beard vegetation association 808: Grasslands, curly spinifex, low tree savanna; snappy gum over curly spinifex. Based on current information there is approximately 100% of Vegetation Association 808 remaining in both the state and the Central Kimberley IBRA Bioregion (Shepherd, 2001). As a result the conservation status of Beard vegetation association 808 is considered to be of least concern. Based on this, the proposed clearing area cannot be considered to be a significant remnant of native vegetation within an extensively cleared area.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	% of Pre- European area in IUCN Class I- IV Reserves (and current %)
IBRA Bioregion – Central Kimberley	7,675, 477	7,675,477	~ 100	Least Concern	4.4 (4.4)
Beard veg assoc.  – State					
808	1,168,949	1,168,949	~ 100	Least Concern	0.9 (0.9)
Beard veg assoc.  – Bioregion					
808	1,128,244	1,128,244	~ 100	Least Concern	0.9 (0.9)

<sup>\*</sup> Shepherd et al. (2001)

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

## Methodology Department of Natural Resources and Environment (2002).

Shepherd et al., (2001).

GIS Database:

Pre-European Vegetation - DA 01/01

Interim Biogeographic Regionalisation of Australia - EA 18/10/00

<sup>\*\*</sup> Department of Natural Resources and Environment (2002)

## (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 is one non-perennial watercourse which intersects the application area (GIS Database). According to Sally Malay Exploration Pty Ltd (2007) the area is minor, common and contains spinifex type vegetation. Photos of the vegetation within the application area submitted to the assessing officer indicate that the vegetation present within the application area is not riparian in nature (MBS Environmental, 2007).

Based on the information above, the proposed clearing may be at variance to this Principle. However, SME have made a commitment to avoid clearing within this watercourse. If the proponent was to clear within watercourses of the application area, a Bed and Banks Permit would be required from the Department of Water. It is recommended that should the permit be granted, a condition be placed on the permit to prevent clearing within any watercourses that occur within the application area.

#### Methodology MBS Environmental (2007).

Sally Malay Exploration Pty Ltd (2007).

GIS Database:

Hydrography, linear (medium scale, 250k GA)

Hydrography, linear - DOE 1/2/04 Geodata, Lakes - GA 28/06/02

## (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 landform of the application area is a stony plain and wide interfluves type landform, which is characterised by gently sloped interfluves and moderately incised drainage lines (Sally Malay Exploration Pty Ltd, 2007). The soils of the application area are skeletal in nature with rubbly outcrops of few to abundant grit and pebbles of granite (Sally Malay Exploration Pty Ltd, 2007). This information was verified by photos submitted to the assessing officer in the desktop survey by MBS Environmental (2007).

The erosion potential in the application area is likely to be low as the surface is comprised of a stony mantle of granite which is likely to provide protection from erosional forces (MBS Environmental, 2007). In addition, the area proposed to be cleared is small (0.34ha) and located on a relatively level plain, which limits the potential for erosion when compared to the surrounding areas which are heavily sloped.

The proposed clearing will be completed using a raised blade (MBS Environmental, 2007), this method leaves root stock within the topsoil and therefore reduces the likelihood of erosion occurring. It should also be noted that the drill pads which are proposed to be installed are non-contiguous, thereby reducing the total clearing footprint. Based on this, it is unlikely that there will be an increased potential for erosion to occur from the proposed clearing.

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

## **Methodology** MBS Environmental (2007).

Sally Malay Exploration Pty Ltd (2007).

# (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 located within an Environmentally Sensitive Area as it is listed on the Register of National Estate (named as the Middle Ord Region (Purnululu)) (GIS Database). The Middle Ord Region has significant natural and Indigenous heritage values. It also supports plant and animal communities and species which are at the limit of their range, which are disjunct or outlying from other populations, or which are endemic to the area (Australian Heritage Database, 2008).

The closest conservation areas to the application area are the Purnululu Nature Reserve (C-class) and the Bungle Bungle National Park, both of which are located approximately 4.5 km to the east (GIS Database). Mabel Downs pastoral station which is a Department of Environment and Conservation proposed 2015 pastoral lease exclusion zone is also found approximately 3.5km to the east of the application area. The Bungle Bungle National Park (which covers a similar range to the Purnululu Nature Reserve) has exceptional natural values in the form of eroded sandstone towers and banded beehive structures of the Bungle Bungle Range (Australian Heritage Database, 2008). This area is located in a transitional climate zone and possesses unique natural and cultural values (Australian Heritage Database, 2008). A rich mixture of species, some of them endemic or on the edge of their ranges are found here, such as the remarkably diverse range of spinifex species present (Australian Heritage Database, 2008).

The condition of vegetation within the application area is in a degraded state due to pastoral grazing, recent bushfires, weed invasions and previous exploration activities (MBS Environmental, 2007). As a result of this

degradation, it is unlikely that the application area contains any of the significant environmental values of conservation areas mentioned above. Furthermore the area proposed to be cleared is small (0.34ha) and is unlikely to have a net impact on the environmental values of any of the conservation areas mentioned above.

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

#### **Methodology** Australian Heritage Database (2008).

MBS Environmental (2007).

GIS Database:

CALM Managed Lands and Waters - CALM 1/07/05 Clearing Regulations - Environmentally Sensitive Areas

Register of National Estate 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 is not likely to be at variance to this Principle

The proposed clearing is not located within a Public Drinking Water Source Area (PDWSA) (GIS Database).

Surface water in the application area is likely to drain into a small non-perennial watercourse (which intersects the application area), via sheetflows (GIS Database). Given the stony granite mantle present in the application area, it is unlikely clearing will result in sedimentation of watercourses within and surrounding the application area (MBS Environmental, 2007). Furthermore no clearing will be required within the watercourse located in the application area. Based on this, It is recommended that should the permit be granted, a condition be placed on the permit to prevent clearing within any watercourses of the application area.

Groundwater within the area under application is fresh at between 500 - 1000 milligrams per litre of Total Dissolved Solids (TDS). Given the small size of the proposed clearing (0.34 hectares) and the large size of the Halls Creek groundwater province, the quality of groundwater is unlikely to be impacted from the proposed clearing (GIS Database).

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

#### Methodology MBS Environmental (2007).

GIS Database:

**Groundwater Provinces** 

Groundwater Salinity, Statewide - DOW Hydrography, linear - DOE 1/2/04.

Public Drinking Water Source Areas (PDWSAs) - DOW

# (j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

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

The application area is located on a relatively flat to undulating plain (MBS Environmental, 2007). A small non-perennial watercourse traverses the application area, and this eventually disperses into the Frank River (GIS Database). There are also numerous non-perennial watercourses surrounding the application area. Based on the topography present, it is likely that any runoff is likely to move towards these watercourses via sheetflows (GIS Database).

The climate of Halls Creek (which includes the application area) is characterised by hot wet summers and mild dry winters (BoM, 2007). The average rainfall of the region is approximately 555mm, whilst the annual evaporation rate of the region is approximately 3,400mm, which is approximately six times the average rainfall (BoM, 2007). Based on the drainage patterns of the application area and the high evaporation rates present, there is still the potential for flooding, however the intensity and duration of flooding events are likely to be low.

The clearing of 0.34 hectares within the Ord River - Upper Catchment (45,260km) (GIS Database), is unlikely to increase the incidence or intensity of flooding events.

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

#### Methodology BoM (2007).

MBS Environmental (2007).

GIS Dtabase:

Evapotranspiration, Point Potential Hydrographic Catchments - Catchments

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

#### Comments

The clearing permit application was advertised, inviting submissions from the public. One public submission was received from Kimberley Land Council (KLC), raising concerns regarding the potential impacts of the proposed vegetation clearing on Native Title rights, Sites of Aboriginal Significance and Cultural Heritage Issues. In response to the issues raised by KLC a letter of reply was sent on the 23 January, 2008.

There is one native title claim over the area under application (WC99\_044) (GIS Database). The exploration licence 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 is one registered Site of Aboriginal Significance located approximately five kilometres north-east of the application area (Site ID 13697) (GIS Database). 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.

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.

#### Methodology

GIS Databases:

Aboriginal Sites of Significance - DIA

Native Title Claims - DLI

#### 4. Assessor's comments

## Purpose Method Applied Comment area (ha)/ trees

Mineral Mechanical Exploration Removal

nical 0.34

The proposal has been assessed against the Clearing Principles and has been found not at variance to Principle (e), not likely to be at variance to Principles (a), (b), (c), (d), (g), (h), (i) and (j), and may be at

variance to Principle (f).

Should the permit be granted, it is recommended that conditions be imposed on the permit for the purposes of land degradation management, habitat preservation, record keeping and permit reporting.

## 5. References

Australian Heritage Database (2007) Middle Ord Region (Purnululu), Great Northern Hwy, Argyle Village via Halls Creek, WA, Australia. URL: http://www.environment.gov.au

Australian Heritage Database (2008) Purnululu National Park, Halls Creek, WA, Australia. URL:

http://www.environment.gov.au

BoM (2007) Halls Creek Area Climate and History. URL:

http://www.bom.gov.au/weather/wa/halls\_creek/climate\_and\_history.shtml

Garnett, S.T. and Crowley, G.M. 2000. The Action Plan for Australian Birds 2000. Environment Australia, Canberra.

Graham, G (2001) Central Kimberley 2 (CK2 - Hart subregion) Subregional description and biodiversity values in "A

Biodiversity Audit of Western Australia's 53 Biogeographical Subregions in 2002" published by the Department of Conservation and Land management Western Australia.

MBS Environmental (2007) Desktop Flora and Fauna Survey. Prepared for Sally Malay Exploration Pty Ltd, 17 August 2007. Sally Malay Exploration Pty Ltd (2007) Additional information provided in support of clearing permit, Perth Western Australia.

## 6. Glossary

### **Acronyms:**

**BoM** Bureau of Meteorology, Australian Government.

**CALM** Department of Conservation and Land Management, Western Australia.

**DAFWA** Department of Agriculture and Food, Western Australia.

DA Department of Agriculture, Western Australia.DEC Department of Environment and Conservation

**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.

**DOLA**Department of Industry and Resources, Western Australia.

DOLA
Department of Land Administration, Western Australia.

**DoW** Department of Water

**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:**

R

X

**P3** 

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

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.

**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.

Declared Rare Flora - Presumed Extinct taxa: taxa which have not been collected, or otherwise verified, over the past 50 years despite thorough searching, or of which all known wild populations have been destroyed more recently, and have been gazetted as such, following approval by the Minister for the Environment, after recommendation by the State's Endangered Flora Consultative Committee.

{Wildlife Conservation (Specially Protected Fauna) Notice 2005} [Wildlife Conservation Act 1950] :-

Schedule 1 — Fauna that is rare or likely to become extinct: being fauna that is rare or likely to become extinct, are declared to be fauna that is need of special protection.

Schedule 2 — 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 — Birds protected under an international agreement: being birds that are subject to an agreement between the governments of Australia and Japan relating to the protection of migratory birds and birds in danger of extinction, are declared to be fauna that is need of special protection.

Schedule 4 — Other specially protected fauna: being fauna that is declared to be fauna that is in need of special protection, otherwise than for the reasons mentioned in Schedules 1, 2 or 3.

{CALM (2005). Priority Codes for Fauna. Department of Conservation and Land Management, Como, Western Australia}:-

P1 Priority One: Taxa with few, poorly known populations on threatened lands: Taxa which are known from few specimens or sight records from one or a few localities on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, active mineral leases. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.

P2 Priority Two: Taxa with few, poorly known populations on conservation lands: Taxa which are known from few specimens or sight records from one or a few localities on lands not under immediate threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, vacant Crown land, water reserves, etc. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.

Priority Three: Taxa with several, poorly known populations, some on conservation lands: Taxa which are known from few specimens or sight records from several localities, some of which are on lands not under

immediate threat of habitat destruction or degradation. The taxon needs urgent survey and evaluation of conservation status before consideration can be given to declaration as threatened fauna.

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.

**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:

**P5** 

- (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.