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

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 4872/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Anglo American Exploration (Australia) Pty Ltd**

1.3. Property details

Property: Exploration Licence 69/2583
Local Government Area: Shire of Ngaanyatjarraku
Colloquial name:

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 26 April 2012

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 and are useful to look at vegetation in a regional context. One Beard vegetation association has been mapped within the application area; Beard vegetation association 236: Hummock grasslands, shrub steppe; mulga and mallee (marble gum) over hard spinifex (GIS Database; Shepherd, 2009).

Western Botanical (2011) conducted a vegetation and flora survey of the application area and surrounding areas between 15 and 18 October 2011, and described 12 broad vegetation communities within the application area:

Gravelly Lateritic Rise
- Mulga woodland over *Eragrostis desertorum* on gravely rise;

Hardpan
- *Acacia kempeana* (Wanderrie) bank grassy shrubland;

Rocky Granitic Hill
- *Acacia grasbyi* (Miniritchie) over *Aluta* shrubland and Spinifex hummock grassland;

Sand Dune
- Sand Dune Acacia/Grevillea shrubland;

Sand Sheet
- Aluta shrubland;
- Mallee and Mulga shrubland over *Myrtaceous* shrubs over spinifex hummock grassland;
- Mallee shrubland over Spinifex hummock grassland
- Mallee, *Acacia sericophylla* over spinifex hummock grassland;
- Mulga and Mallee shrubland over spinifex hummock grassland;
- Mulga over spinifex hummock grassland;
- Mulga woodland over Wanderrie grasses; and
- Spinifex hummock grassland.

Clearing Description

Anglo American Exploration (Australia) is proposing to clear up to 6.3 hectares of native vegetation within a 1,281 hectare application area, for the purpose of mineral exploration.

The vegetation will be cleared using mechanical clearing. The vegetation and topsoil will be stockpiled for use in rehabilitation.

Vegetation Condition

Pristine: No obvious signs of disturbance (Keighery, 1994).

Comment

The application area is located in the Central and Eastern subregions of Western Australia and is situated approximately 632 kilometres north-east of the Laverton town site (GIS Database).

The vegetation condition was derived from a vegetation survey conducted by Western Botanical (2011).

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 may be at variance to this Principle

The application area occurs within the Central and Eastern subregion of the Great Victoria Desert IBRA bioregion (GIS Database). The Central and Eastern subregion is characterised by landforms which consist of salt lakes and major valley floors with lake derived dunes. Sand plains with extensive seif dunes running east west, occasional outcropping (breakaways) and quartzite hills provide minor relief. Vegetation is primarily a Tree steppe of *Eucalyptus gongylocarpa*, Mulga and *E. youngiana* over hummock grassland dominated by *Triodia basedowii* on the Aeolian sands. The *Acacia* dominates colluvial soils with *Eremophila* and *Santalum* spp., halophytes are confined to edges of salt lakes and saline drainage systems (CALM, 2002a; 2002b).

The vegetation within the application area has been broadly mapped as Beard vegetation association 236 (GIS Database) which according to Shepherd (2009), is common and widespread both locally and regionally, and remains largely uncleared.

A flora and vegetation survey of the application area and surrounding area was undertaken by Western Botanical (2011) between 15 and 18 October 2011. A total of 146 vascular plant taxa from 76 genera belonging to 24 families were recorded within the application area (Western Botanical, 2011). This is typical of the floristics of the Eastern and Central subregions (Western Botanical, 2011). The condition of the vegetation was determined to be 'pristine' (Western Botanical, 2011; Keighery, 1994). A search of the Department of Environment and Conservation Declared Rare and Priority Flora databases revealed that no Threatened flora species and no Priority species may potentially occur within a 40 kilometre radius of the application area (DEC, 2012). Western Botanical (2011) identified no Threatened flora, Threatened Ecological Communities or Priority Ecological Communities within the application area (Western Botanical, 2011; GIS Database). Western Botanical (2011) recorded two Priority flora species within the application area; *Euphorbia parvicaruncula* (Priority 1 species) and *Calotis latiuscula* (Priority 3 species). The level of biological knowledge of the Great Victoria Desert bioregion area is relatively low (CALM, 2002a; 2002b). Potential impacts to Priority flora as a result of the proposed clearing may be minimised by the implementation of a flora management condition.

A search on NatureMap (DEC, 2012) found that no weed species had been recorded within the application area or surrounding region. 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.

The flora survey conducted by Western Botanical (2011) and analysis of aerial imagery identified five potential broad fauna habitat types within the application area. These are considered to be in 'pristine' condition (Western Botanical, 2011; Keighery, 1994; GIS Database). Fauna habitat such as 'Gravelly Lateritic Rise' and 'Sand Sheets' contain mulga plains with potential tree hollows, logs or leaf litter is suitable for conservation significant fauna such as the Brush-tailed Mulgara (*Dasycercus blythi*) and the Greater Bilby (*Macrotis lagotis*) that may potentially occur in the area. Sand dunes and sand plains habitat are ideal for conservation significant fauna as above and also the Northern Marsupial Mole (*Notoryctes caurinus*) (ENV Australia, 2011).

The shortage of biological survey data from the area, both supplied by the applicant and available from other sources, brings a level of uncertainty when assessing the level of biological diversity of the application area. However, the broad-scale vegetation types and fauna habitat types are common and widespread both locally and regionally. Aerial imagery also suggests the widespread availability of similar vegetation communities and landforms, and the application area is not considered to support a higher biological diversity than the adjoining local or regional areas (GIS Database). Given the small area proposed to be cleared (6.3 hectares), it is not likely that the proposed clearing will have any significance on biodiversity at a regional scale.

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

Methodology

CALM (2002a)
CALM (2002b)
DEC (2012)
ENV Australia (2011)
Keighery (1994)
Shepherd (2009)
Western Botanical (2011)
GIS Database:
- Blackstone 1.25m Orthomosaic - Landgate 2002
- Vines 1.3 Orthomosaic - Landgate 2005
- Pre-European Vegetation
- IBRA WA (regions - subregions)
- Threatened Ecological Sites Buffered

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

Comments

Proposal may be at variance to this Principle

No fauna surveys were undertaken over the application area. Western Botanical (2011) conducted a flora and vegetation survey of the application area in October 2011 and identified five landform units within the application area and surrounding area:

1. Gravelly Lateritic Rise;
2. Hardpan;
3. Rocky Granitic Hill;
4. Sand Dune; and
5. Sand Sheet (Western Botanical, 2011).

The flora and vegetation survey and aerial photography suggest significant fauna habitat may be present within the application area within the mulga plain and sand dunes/sand plain (Western Botanical, 2011; GIS Database). Western Botanical (2011) suggests the vegetation to be in 'pristine' condition (Keighery, 1994; GIS Database). The application area occurs within the Central and Eastern subregion of the Great Victoria Desert (GIS Database). This bioregion retains approximately 99% of its pre-European vegetation (GIS Database; Shepherd, 2009). Analysis of aerial imagery demonstrates that the local area remains largely uncleared. The vegetation communities and associated fauna habitats are considered common and widespread in the local and regional area.

There are two species of mammals listed as Threatened Species under the *Environment Protection and Biodiversity Conservation Act 1999* or protected under Western Australian legislation (*Wildlife Conservation Act, 1950*), that may potentially occur within the application area based on habitat type and vegetation mapping associated with the tenement; these being the Australian Bustard (*Ardeotis australis*) and Bush-tailed Mulgara (*Dasycercus blythi*) (DEC, 2012; Western Botanical, 2011; ENV Australia, 2011).

The flora and vegetation survey conducted by Western Botanical (2011) also suggests potential habitat for the Malleefowl (*Leipoa ocellata*), Greater Bilby (*Macrotis lagotis*) and Northern Marsupial Mole (*Notoryctes typhlops*) which may occupy areas within the application area due to potential suitable faunal habitats (i.e. Sand Dune/Sand Sheet landforms and Gravelly Lateritic Rises which are suitable for burrowing and digging fauna) occurring in the area (DEC, 2012; ENV Australia, 2011; Western Botanical, 2011).

Some of these species are considered highly mobile and/or have a wide distribution so the clearing is unlikely to significantly impact on the species (ENV Australia, 2011). However, the Brush-tailed Mulgara, Greater Bilby, Northern Marsupial Mole and Black-footed Wallaby are ground-dwelling conservation significant fauna with limited dispersal abilities and are more likely to be impacted on by any development (ENV Australia, 2011). Therefore, any core habitats such as burrows could be considered as significant and should be avoided.

The area proposed to be cleared is relatively small (6.3 hectares), spread over a large application area, and there are large amounts of uncleared vegetation in the Central and Eastern subregion. However, there is little biological knowledge of the region. Only limited fauna information is available for the Central and Eastern subregion due to a lack of fauna surveys being completed in the remote region (CALM 2002a; 2002b). The conservation values of the application area in regards to fauna, in particular conservation significant species, are uncertain and cannot be fully understood until on-ground fauna surveys are conducted. Potential impacts to conservation significant fauna as a result of the proposed clearing may be minimised by the implementation of a fauna management condition.

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

Methodology

CALM (2002a)
CALM (2002b)
DEC (2012)
ENV Australia (2011)
Keighery (1994)
Shepherd (2009)
Western Botanical (2011)
GIS Database:
- Blackstone 1.25m Orthomosaic - Landgate 2002
- Vines 1.3 Orthomosaic - Landgate 2005
- Pre-European Vegetation
- IBRA WA (regions - subregions)

(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 records of Threatened flora within the application area (GIS Database). A search of the Department of Environment and Conservation Declared Rare and Priority Flora databases identified no Threatened flora species as occurring within a 20 kilometre radius of the application area (DEC, 2012).

Western Botanical (2011) conducted a vegetation and flora survey of the application area and surrounding areas between 15 and 18 October 2011. No Threatened flora were recorded within the survey area.

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

Methodology

DEC (2012)
Western Botanical (2011)
GIS Database:
- Threatened 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 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 Great Victoria Desert IBRA bioregion (GIS Database). The vegetation within the application area is recorded as:

Beard vegetation association 236: Hummock grasslands, shrub steppe; mulga and mallee (marble gum) over hard spinifex (GIS Database; Shepherd, 2009).

According to Shepherd (2009), Beard vegetation association 236 retains approximately 99% of its pre-European extent. Therefore, the area proposed to be cleared is not a significant remnant of native vegetation in an area that has been extensively cleared.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in IUCN Class I-IV Reserves
IBRA Bioregion - Great Victoria Desert	21,794,207	21,785,242	~99.96	Least Concern	8.46
Beard vegetation associations - State					
236	1,626,899	1,617,443	~99.42	Least Concern	-
Beard vegetation associations - Bioregion					
236	1,619,192	1,612,408	~99.58	Least Concern	-

* Shepherd (2009)
** 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 (2009)
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 at variance to this Principle

According to available databases, there are no watercourses or wetlands within the application area (GIS Database). The vegetation within the application area is not considered to be growing in association with any watercourse or wetland.

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

Methodology

GIS Database:
- Geodata, Lakes
- Hydrography, Linear

(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

Anglo American Exploration (Australia) Pty Ltd has applied to clear up to 6.3 hectares within an application area of approximately 1,281 hectares for the purpose of mineral exploration. Disturbance associated with access tracks will be restricted to vehicles and drilling equipment driving over vegetation with a raised blade or using existing access tracks, and drill pads will be cleared using a raised blade (Western Botanical, 2011). The proposed clearing activities are not likely to result in large areas of disturbed or open land. Given the nature and scale of the proposed activities, the clearing is not likely to result in appreciable land degradation.

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

Methodology

Western Botanical (2011)

(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 areas (GIS Database). The nearest conservation area is the Gibson Desert Nature Reserve, located approximately 230 kilometres north-west of the application areas (GIS Database). Given the distance separating Gibson Desert Nature Reserve and the application areas, the proposed clearing is not likely to impact the environmental values of the conservation area.

Given the distance of the application area from the Gibson Desert Nature 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 not located within a Public Drinking Water Source Area (GIS Database). The application areas are located within the proclaimed East Murchison groundwater area under the *Rights in Water and Irrigation Act 1994* (GIS Database). Any groundwater extraction and/or taking or diversion of surface water for the purposes other than domestic and/or stock watering is subject to licence by the Department of Water.

There are no permanent watercourses or water bodies within the application area (GIS Database). Any surface water within the application areas is likely to only remain for short periods following significant rainfall events. The proposed clearing is not likely to cause deterioration in the quality of any surface water within or outside of the application areas.

Given the low impact nature of the proposed clearing activities, the proposed clearing is not likely to cause deterioration in the quality of any underground water.

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

Methodology

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 climate with summer and winter rainfall, with an annual average rainfall of approximately 288.7 millimetres per year (BoM, 2012; CALM, 2002). Based on an average annual evaporation rate of 3,200- 3,600 millimetres (BoM, 2012), any surface water resulting from rainfall events is likely to be relatively short lived.

Given the size of the area to be cleared (6.3 hectares) compared to the size of the Warburton catchment area (17,195,889 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 (2012)
CALM (2002a)
CALM (2002b)
GIS Database:
- Hydrographic Catchments - Catchments
- Hydrography, Linear

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

Comments

There is one Native Title claim over the area under application (WC04/3). 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 is no registered Aboriginal Site 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 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 20 February 2012 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received in relation to the proposed clearing.

Methodology

GIS Database:
- Aboriginal Sites of Significance
- Native Title Claims - Determined by the Federal Court

4. References

BoM (2012) Climate Statistics for Australian Locations. A Search for Climate Statistics for Giles Meteorological Office, Australian Government Bureau of Meteorology, viewed 13 April 2012, <http://reg.bom.gov.au/climate/averages/tables/cw_013017.shtml>.

CALM (2002a) Biological Summary of the 2002 Biodiversity Audit for Western Australia, A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions in 2002 - Great Victoria Desert 2 (GVD2) - Great Victoria Desert Central subregion), ed. N.L McKenzie, J.E May and S. McKenna, Government of Western Australia, Perth, Western Australia.

CALM (2002b) Biological Summary of the 2002 Biodiversity Audit for Western Australia, A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions in 2002 - Great Victoria Desert 3 (GVD3) - Great Victoria Desert Eastern subregion), ed. N.L McKenzie, J.E May and S. McKenna, Government of Western Australia, Perth, Western Australia.

DEC (2012) NatureMap - Mapping Western Australia Biodiversity, Department of Environment and Conservation, viewed 13 April 2012, <http://naturemap.dec.wa.gov.au>.

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.

ENV Australia (2011) Musgraves Flora and Fauna Desktop Review. Unpublished report prepared for Traka Resources Limited, January 2011.

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. (2009) 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 (2011) Advice of findings, botanical survey of Skirmish Hill prospect, E69/2151 & E69/2583, West Musgrave Exploration Project. WB Ref: WB 758. Prepared for Anglo American Exploration (Australia) Pty Ltd, January 2012

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.