



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 3789/1
Permit type: Purpose Permit

1.2. Proponent details

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

1.3. Property details

Property: Mining Lease 38/345
Local Government Area: Shire of Laverton
Colloquial name: West Laverton Gold Deposit

1.4. Application

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

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

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

18: Low woodland; mulga (*Acacia aneura*) (GIS Database; Shepherd, 2007).

The application area was surveyed by J & J Tucker Environmental Solutions staff on 11 and 12 April 2008 (J & J Tucker Environmental Solutions, 2008). A large portion of the application area is heavily disturbed with the prominent features being two open cut pits and an associated waste dump with a flat laydown area in the north-east corner (J & J Tucker Environmental Solutions, 2008). The north-western corner of the application area was determined to be the least disturbed (J & J Tucker Environmental Solutions, 2008).

According to J & J Tucker Environmental Solutions (2008) the waste dump has previously been rehabilitated, however the vegetation cover and species diversity is poor, with erosion also occurring. The vegetation on the waste dump is dominated by chenopods, principally *Atriplex bunburyana*, *Atriplex vesicaria* and *Maireana* species (J & J Tucker Environmental Solutions, 2008).

The old haul road has been narrowed by deep ripping of the edges to produce a road which is suitable for light vehicles. Vegetation has established in the rips and is representative of the local flora (J & J Tucker Environmental Solutions, 2008).

The disturbed areas of the application area have a shrubby mid storey of various species including *Senna*, *Acacia* and *Cratystylis* species over chenopods, *Solanaceae* and *Ptilotus* species among others (J & J Tucker Environmental Solutions, 2008). The undisturbed areas have an upper storey of plants including *Acacia*, *Eremophila*, *Santalum* species and *Dodonaea rigida* (J & J Tucker Environmental Solutions, 2008). The midstorey and understorey suites are similar in the both the undisturbed and disturbed areas (J & J Tucker Environmental Solutions, 2008).

Clearing Description Crescent Gold Limited is proposing to clear up to 25 hectares of native vegetation to develop the West Laverton Gold Deposit (Crescent Gold Limited, 2010). This development will include an open pit mine, waste rock landform, haul roads, laydown areas and miscellaneous infrastructure (Crescent Gold Limited, 2010). Vegetation will be cleared by a bulldozer or other heavy plant equipment. Cleared vegetation and topsoil will stockpiled for use in rehabilitation.

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

Comment The application area is located in the Goldfields region, approximately 2.2 kilometres west of Laverton (GIS Database). The vegetation condition was derived from a vegetation survey conducted by J & J Tucker Environmental Solutions (2008).

3. Assessment of application against clearing principles

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

Comments

Proposal is not likely to be at variance to this Principle

The application area occurs within the Eastern Murchison (MUR1) subregion of the Murchison Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). This sub-region is characterised by internal drainage, and extensive areas of elevated red desert sand plains with minimal dune development (CALM, 2002). It contains salt-lake systems associated with the occluded Paleodrainage system (CALM, 2002). This sub-region has broad plains of red-brown soils and breakaway complexes as well as red sand plains (CALM, 2002). The vegetation is dominated by Mulga woodlands often rich in ephemerals, hummock grasslands, saltbush shrub lands and *Halosarcia* shrub lands (CALM, 2002).

A vegetation survey of the application area and surrounding vegetation identified 41 flora species belonging to 26 genera from 20 families (J & J Tucker Environmental Solutions, 2008). The flora found in the application area is typical of the Laverton area (J & J Tucker Environmental Solutions, 2008). The entire survey area is considered to be degraded, with the only portion of the application area approaching a natural condition is the north-western portion. However this area is well represented topographically and floristically in the Laverton area (J & J Tucker Environmental Solutions, 2008).

Four alien weed species were recorded within the vegetation survey area (J & J Tucker Environmental Solutions, 2008). These were: *Schinus molle*, *Acetosa vesicaria*, Prickly Paddy Melon (*Cucumis myriocarpus*) and Athel Tree (*Tamarix aphylla*) (J & J Tucker Environmental Solutions, 2008). Weeds have the potential to alter the biodiversity of an area, competing with native vegetation for available resources and making areas more fire prone. This in turn can lead to greater rates of infestation and further loss of biodiversity if the area is subject to repeated fires. One of these species (*Tamarix aphylla*) is listed as 'Declared Plant' species under the *Agriculture and Related Resources Protection Act 1976* by the Department of Agriculture and Food (DAFWA). This species is a Priority 1 species and therefore the movement of this plant or its seeds within the state is prohibited, as is the movement of contaminated machinery and produce including livestock and fodder (DAFWA, 2010). Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

The application area lies adjacent to the existing Mary Mac South operation with a large portion of the application area having been heavily disturbed with the prominent features being two open cut pits and an associated waste dump with a flat laydown area in the north-east corner (J & J Tucker Environmental Solutions, 2008). Therefore, the application area has previously been affected by the construction and operation of infrastructure associated with existing operations.

Parts of the application area have been degraded by previous disturbance from mining and pastoral activities. The landforms, vegetation types and fauna habitats in the application area are well represented in the Murchison Region (J & J Tucker Environmental Solutions, 2008; GIS Database). It is not likely that the application area comprises a higher level of biological diversity than other undisturbed areas within the sub-region.

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

Methodology

CALM (2002)
DAFWA (2010)
J & J Tucker Environmental Solutions (2008)
GIS Database
- IBRA WA (regions - subregions)

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

Comments

Proposal is not likely to be at variance to this Principle

According to Shepherd (2007) approximately 100% of the pre-European vegetation remains within the Murchison bioregion. Given the extent of native vegetation remaining in the local area and bioregion, the vegetation to be cleared does not represent a significant ecological linkage.

Coffey Environments (2008) recorded one broad habitat type as occurring within the application area: Mulga woodland on a rocky-clay substrate.

The application area has been extensively disturbed by previous mining and pastoral activities and generally lacks high quality habitat. The broad habitat type contained within the application area is open Mulga woodland which is represented widely in the Laverton region (Coffey Environments, 2008).

All vertebrate species that are likely to occur within the application area are wide-ranging and are unlikely to be impacted on a regional level (Coffey Environments, 2008).

The proposed clearing is unlikely to result in a significant impact on fauna or the availability of fauna habitat in

the local or regional area.

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

Methodology Coffey Environments (2008)
Shepherd (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

According to available GIS Databases there are no known records of Declared Rare Flora (DRF) or Priority Flora within the application area (GIS Database). The nearest record of Priority Flora is a population of *Goodenia lyrata* (P1) located approximately 27.5 kilometres west of the application area (GIS Database).

A flora survey was conducted over the application area by staff from J & J Tucker Environmental Solutions on 11 and 12 April 2008 (J & J Tucker Environmental Solutions, 2008).

Relatively low rainfall in the months prior to the survey meant that most annuals were absent during the survey period. However, a desktop database search of the Department of Environment and Conservation's (DEC) Threatened (Declared Rare) Flora database, Australian Herbarium Specimen database for priority species, DEC's Declared Rare and Priority Flora List and DEC's Threatened Ecological Communities (TEC) database indicated that three known annuals of conservation significance may occur within the application area. Namely, these are: *Vittadinia cervicularis* var. *oldfieldii* (P1), *Goodenia lyrata* (P1) and *Gunniopsis propinqua* (P3) (J & J Tucker Environmental Solutions, 2008).

No DRF or Priority Flora species were recorded within the application area (J & J Tucker Environmental Solutions, 2008).

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

Methodology J & J Tucker Environmental Solutions (2008)
GIS Database
- Declared Rare and Priority Flora List

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

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

A search of available databases reveals that there are no Threatened Ecological Communities (TECs) within the application area (GIS Database). There are no TECs located within the Eastern Murchison IBRA sub-region (CALM, 2002). J & J Tucker Environmental Solutions (2008) reported that no TECs were identified during the flora survey of the application area.

The application area intersects a 10 kilometre buffer zone around the Mount Jumbo vegetation complex, which is a Priority Ecological Community (PEC). The Mount Jumbo vegetation complex is listed as an 'ecosystem at risk' in 'A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions in 2002' (CALM, 2002). The Mount Jumbo Range Vegetation Complex has been given a status of vulnerable, with threatening processes being listed as grazing pressure, feral animals (goats and rabbits) and changed fire regimes (CALM, 2002). The vegetation types according to the National Vegetation Inventory System (NVIS), listed as occurring in this area are mixed species arid *Acacia* woodlands and shrub lands. The Mount Jumbo Range Vegetation Complex is listed as being in good condition although vulnerable (CALM, 2002).

The development of the West Laverton Deposit is not likely to impact on this PEC.

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

Methodology CALM (2002)
J & J Tucker Environmental Solutions (2008)
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 falls within the Murchison IBRA bioregion (GIS Database). Shepherd (2007) reports that approximately 100% of the pre-European vegetation remains in this bioregion.

The vegetation within the application area is recorded as Beard vegetation association:

18: Low woodland; mulga (*Acacia aneura*) (GIS Database; Shepherd, 2007).

According to Shepherd (2007) approximately 100% of this Beard Vegetation Association remains within the Murchison bioregion (see table below).

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in IUCN Class I-IV Reserves
IBRA Bioregion - Murchison	28,120,590	28,120,590	~100%	Least Concern	~1.06%
Beard vegetation associations - State					
18	19,892,305	19,890,195	~99.99%	Least Concern	~2.13%
Beard vegetation associations - Bioregion					
18	12,403,172	12,403,172	~100%	Least Concern	~0.37%

* Shepherd (2007)

** Department of Natural Resources and Environment (2002)

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

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

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

Comments **Proposal is not likely to be at variance to this Principle**
According to available GIS databases, there are no watercourses or wetlands within the application area (GIS Database).

Based on vegetation mapping conducted by J & J Tucker Environmental Solutions (2008) and analysis of aerial photography (GIS Database) the vegetation community found within the application area is not considered to be riparian vegetation.

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

Methodology J & J Tucker Environmental Solutions (2008)
GIS Database
- Hydrography, Linear
- Geodata, Lakes
- Laverton 50cm Orthomosaic - Landgate 2006

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

Comments **Proposal may be at variance to this Principle**
The application area has been surveyed by the Department of Agriculture and Food (Van Vreeswyk et al., 1994). The application area is comprised of the Violet Land System (GIS Database).

The Violet Land System is described as undulating stony and gravelly plains and low rises, supporting mulga shrub lands (Van Vreeswyk et al., 1994). The original topography of the application area is fairly flat, draining south to north towards the Old Laverton Road (J & J Tucker Environmental Solutions, 2008). The application area is most likely to fall within the 'narrow drainage tracts' and 'stony plains' land units of the Violet Land System. The soils of these land units are not susceptible to erosion due to abundant stony mantles except in the narrow drainage tracts land unit which are mildly susceptible to water erosion (Van Vreeswyk et al., 1994). In circumstances where the mantle is removed or disturbed, the soil can become moderately susceptible to water erosion.

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

Methodology J & J Tucker Environmental Solutions (2008)
Van Vreeswyk et al. (1994)
GIS Database
- Rangeland Land System Mapping

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

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

The proposed clearing is not located within a conservation reserve (GIS Database). According to available databases there are no known conservation reserves within a 50 kilometre radius of the application area (GIS Database).

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

Methodology GIS Database
- DEC Tenure

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

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

According to available databases, the application area is not located within a Public Drinking Water Source Area (PDWSA) (GIS Database). The Department of Water (DoW) considered the proposal and provided no comment (DoW, 2010).

The groundwater salinity within the application area is approximately 1,000-3,000 milligrams/Litre Total Dissolved Solids (TDS) (GIS Database). Given the size of the area to be cleared (25 hectares) compared to the size of the Yilgarn Goldfields Groundwater Province (29,644,596 hectares) (GIS Database), the proposed clearing is not likely to cause salinity levels within the application area to alter significantly.

There are no permanent water bodies or watercourses within the application area (GIS Database). The application area is located in an arid region, with mainly winter rainfall (CALM, 2002). With an average rainfall of approximately 232.2 millimetres/year and an annual pan evaporation rate of 2,800 millimetres/year (BoM, 2010), there is little surface flow during normal seasonal rains. The proposed clearing is not likely to cause the quality of surface water to deteriorate.

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

Methodology BoM (2010)
CALM (2002)
DoW (2010)
GIS Database
- Public Drinking Water Source Areas
- Groundwater Salinity, Statewide
- Groundwater Provinces
- Hydrography, Linear

(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 an average annual rainfall of 232.2 millimetres recorded from the nearest weather station at Laverton approximately 2.2 kilometres east of the application area (CALM, 2002; BoM, 2010). The application area also experiences a high average annual evaporation rate exceeding the average annual rainfall by more than ten times (approximately 2,800 millimetres) (BoM, 2010). Clearing within the application area is unlikely to exacerbate or increase the incidence or intensity of flooding.

The application area is located within the Lake Carey catchment area (GIS Database). However, the size of the area to be cleared (25 hectares) in relation to the size of the Lake Carey catchment area (11,378,213 hectares) (GIS Database) is not likely to increase the potential for flooding within the application area, local area or within the catchment.

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

Methodology BoM (2010)
CALM (2002)
GIS Database

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

Comments

The clearing permit application was advertised on 21 June 2010 by the Department of Mines and Petroleum inviting submissions from the public. One submission was received in relation to this application regarding aboriginal heritage issues. A written response was provided on the matters raised.

There is one Native Title Claim (WC99_001) over the area under application (GIS Database). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. However, the tenement 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 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 Database
- Aboriginal Sites of Significance
- Native Title Claims

4. Assessor's comments

Comment

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.51O of the *Environmental Protection Act 1986*, and the proposed clearing may be at variance to Principle (g), is not likely to be at variance to Principles (a), (b), (c), (d), (f), (h), (i) and (j) and is not at variance to Principle (e).

5. References

- BoM (2010) Bureau of Meteorology Website - Climate Averages by Number, Averages for LAVERTON. http://www.bom.gov.au/climate/averages/tables/cw_012045.shtml (Accessed 7 July 2010).
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Murchison 1 (MUR1 - East Murchison subregion) Department of Conservation and Land Management, Western Australia.
- Coffey Environments (2008) Level 1 Fauna Assessment West Laverton Deposit and West Laverton Haul Road Laverton Gold Project. Prepared for Crescent Gold Limited. Unpublished Report dated June 2008.
- Crescent Gold Limited (2010) Application Purpose Clearing Permit for expanded mining at West Laverton on Mining Lease M38/345. Supporting Documentation, June 2010.
- DAFWA (2010) Department of Agriculture and Food Website - List of Declared Plants December 2009. www.agric.wa.gov.au/content/PW/WEED/DECP/dec_plants_list.pdf (Accessed 7 July 2010).
- 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.
- DoW (2010) Water Quality Advice. Advice to assessing officer, Native Vegetation Assessment Branch, Department of Mines and Petroleum (DMP), received (8 July 2010). Department of Water, Western Australia.
- J & J Tucker Environmental Solutions (2008) Report No 030508 on Flora survey Carried Out for Crescent Gold at West Laverton Prospect Near Laverton. Prepared for Crescent Gold Ltd. Unpublished report dated June 2008.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Shepherd, D.P. (2007) Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.
- Van Vreeswyk, A.M.E., Payne, A.L., Hennig, P., and Leighton, K.A. (1994) An Inventory and Condition Survey of Rangelands in the North-eastern Goldfields, Western Australia, Department of Agriculture, 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.
DMP	Department of Mines and Petroleum, Western Australia.
DoE	Department of Environment, Western Australia.
DoIR	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:

{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.