Department of Industry and Resources

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 1059/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Birla Nifty Pty Ltd**

1.3. Property details

Property: Mining lease 271 SA (AM70/271)
Local Government Area: Shire of East Pilbara
Colloquial name: Birla Nifty Copper Operations

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	Clearing Description	Vegetation Condition	Comment
Beard Vegetation Association 134: Mosaic: Hummock grasslands, open low tree steppe; desert bloodwood and feathertop spinifex (on) sandhills/ Hummock grasslands, shrub steppe; mixed shrubs over spinifex between sandhills (Hopkins et al., 2001). The proposed clearing area was surveyed by MBS Environmental in October 2005. The dominant vegetation type at the site is found on Sand Plain and is composed of: Triodia/*Acacia transliscens*/*Melaleuca glomerata* plain with small pockets of *Jacksonia Shrubland.* Open Triodia/shrubs with emergent *Corymbia chippendalei* were found on the sand dunes present across the site.	The proposed clearing of 25 hectares over an area of 90 hectares is for the construction of Heap Leach pad 7 (HL7). The construction of HL7 will allow for the decommissioning of Heap Leach pad 1 and the reworking of the other leach pads on the site. Following discussions between the DoIR Native Vegetation Assessor and Birla Nifty Copper Operations (BNCO) approximately 21 of the 25 hectares applied for (or 87%) will be cleared within an area affected by an acid spill that occurred in 2004 (D O'Brien, BNCO Environmental Officer, pers comm. 3/5/2006).	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994) To Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	MBS Environmental (2006) noted that the area is highly disturbed due in part to prior land use. In addition approximately 60 % of the proposed clearing permit area was affected by flooding associated with Cyclone Fay in April 2004. That event resulted in the flooding of the vegetation by acidic process water from the heap leach stormwater ponds situated nearby. The vegetation in that area still remains affected by the flooding and is located between the road to the copper concentrator site and the existing leach pads. The remainder of the area (approximately 40%) was classified by MBS Environmental as in good condition. The vegetation was noted in the October 2005 survey as being common arid species (MBS Environmental 2005). Weeds recorded on site include Ruby Dock *Acetosa vesicaria*, Couch grass *Cynodon dactylon*, Roly Poly *Salsola tragus* and Kapok Bush *Aerva javanica.* The DoIR Native Vegetation Assessor noted that there is an existing weed management plan for the Birla Nifty operation.

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 proposed clearing is located within the Interim Biogeographic Regionalisation of Australia (IBRA) Great Sandy Desert 2 (GSD2 – Mackay) subregion (GIS Database). The biodiversity values of that region are described in Kendrick (2001). The Great Sandy Desert 2 bioregion is noted for its high reptile species diversity, in particular skinks in the genera Lerista and Ctenotus (Kendrick 2001).

As a result of past land use the proposed clearing area has been degraded (MBS Environmental 2006a).

Approximately 40% of the proposed clearing permit area is classified as good (vegetation structure significantly altered by very obvious signs of multiple disturbances) and the remaining 60% classified as completely degraded (structure of the vegetation no longer intact and the area is completely or almost completely without native species). Given the level of degradation present within the proposed clearing permit area it is unlikely that the proposal will be at variance to this principle.

Furthermore Birla Nifty Copper Operations (BNCO) have stated that approximately 21 of the 25 hectares applied for (or 87%) will be cleared within an area affected by an acid spill that occurred in 2004 (D O'Brien, BNCO Environmental Officer, pers comm. 3/5/2006).

CALM concurred with the assessment provided by DoIR and stated that: it would appear unlikely that this proposal would be at variance to any of the relevant biodiversity principles (CALM 2006).

Methodology

CALM (2006).
GIS Database - Interim Biogeographic Regionalisation of Australia - EA 18/10/00.
Kendrick (2001).
MBS Environmental (2006a).

(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

Several fauna surveys have been undertaken in the Nifty lease and surrounding areas (MBS Environmental 2006b). Those previous fauna studies have indicated that four fauna species listed under the Wildlife Conservation (Specially Protected Fauna) Notice 2005 or CALM's own priority fauna list could potentially occur and be affected by the proposed clearing. They are the Great Desert Skink *Egernia kintorei* (Schedule 1, fauna that is rare or is likely to become extinct) Northern Marsupial Mole (or the widely accepted Aboriginal name Kakarratul) *Notorcytes caurinus* (Schedule 1), Mulgara *Dasysercus cristicaudata* (Schedule 1) and Bilby *Macrotis lagotis* (Schedule 1).

The Great Desert Skink appears to have occurred in widespread but connected populations prior to European settlement in the Great Sandy Desert and other deserts of eastern WA, south western NT and north western SA (DEH 2006). That species has suffered an extensive decline since historical white settlement. The presumed threats to that species are the lack of patch fire regimes due to the cessation of traditional land management practices and pressure from exotic predators such as cats and foxes. Studies by Mc Alpin (2001) have shown that populations of that species are likely to be small, dynamic and widely separated. Currently seven populations are known in Australia with three of those located in Western Australia (DEH 2006). While there is suitable habitat present at BNCO repeated surveys and searches have failed to locate that species (MBS 2006a). The nearest known population is located at least 80 kilometres to the south in Rudall River National Park (DEH 2006). Given the lack of evidence within the proposed clearing area from the targeted survey conducted in October 2005 as well as previous surveys in the BNCO area it is unlikely that the proposed clearing will affect that species.

Specimens of the Northern Marsupial Mole have been recorded three times at BNCO since 1994, with the most recent signs being evidence of tracks near the Tailings Storage Facility in July 2004 (MBS Environmental 2006b). The proposed clearing permit area is located in one of the lower lying areas of BNCO and there is a low chance of Northern Marsupial Mole occurring as the substrate is not conducive to tunnelling (Kristy Sell, MBS Director, pers comm.10 March 2006). In October 2005 a targeted search of the clearing area by experienced Aboriginal trackers recommended by two Marsupial Mole experts, failed to find evidence of the species at that time.

A National Recovery Plan has been developed for the Northern Marsupial Mole (Benshemesh 2004). BNCO have developed a comprehensive Marsupial Mole Management Plan (in consultation with CALM, DoE and the author of the National Recovery Plan for that species) to minimise the impacts on this nationally significant species (MBS Environmental 2004). All employees and contractors on the BNCO mine site are required to sit through an induction on the Northern Marsupial Mole given as part of the Environmental induction for that site. Procedures are in place to minimise the impacts to individual animals and to record valuable information in the event of the Northern Marsupial Mole being found during earthworks.

Given the low probability of Northern Marsupial Mole occurring in the immediate area of proposed clearing, the lack of evidence following a targeted search in October 2005, and the Northern Marsupial Mole management Plan measures that are in place, it is unlikely that the proposed clearing will be at variance to this species.

Both the Mulgara and Bilby form distinctive hollows which can be readily identified by skilled observers. Mulgaras have been recorded approximately 10 kilometres east of the proposed clearing permit area during the construction of the gas pipeline between Telfer and Nifty (MBS Environmental 2006b). While there is a possibility that both species may occur in the clearing permit area, no evidence of either species were found in a targeted search of the proposed clearing area in October 2005 (MBS Environmental 2006b).

Given the lack of evidence of the presence of Bilbies or Mulgaras in the area proposed to be cleared, it is unlikely that the proposal is at variance to this principle for those two species.

CALM concurred with the assessment provided by DoIR and stated that: it would appear unlikely that this proposal would be at variance to any of the relevant biodiversity principles (CALM 2006). CALM also recommended that the proposed works should be undertaken in accordance with the Marsupial Mole Management Plan.

Methodology

Benshemesh, J. (2004).
CALM (2006).
DEH (2006).
GIS Database - Threatened Fauna - CALM 30/09/2005.
MBS Environmental (2004).
MBS Environmental (2006b).
Mc Alpin (2001).

(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

The closest known flora species of conservation significance is *Triodia biflora* which is listed as Declared Rare Flora (DRF) under the *Wildlife Conservation Act 1950*, and is recorded approximately 200 kilometres to the north west of the proposed clearing area, near Shay Gap (GIS Database). The proposed clearing area was the subject of a vegetation survey by MBS Environmental between 23 and 28 October 2005. No flora species of conservation significance were recorded at that time (MBS Environmental 2006b). Numerous other vegetation surveys have been carried out within the BNCO area since 1992. No Declared Rare Flora or flora species listed under CALM's own priority list have been recorded during previous surveys of the Nifty Copper Mine areas. The Priority 2 species *Goodenia hartiana* has been located along the gas pipeline route east of the Birla Nifty Copper mine (MBS Environmental 2006b), however none were located in the proposed clearing area. *Goodenia hartiana* is thought to be a disturbance opportunist and it is possible that the clearing will result in that species establishing itself within the purpose permit area (MBS Environmental 2006a).

In its assessment of this proposal CALM offered the following advice: "the Priority 2 species *Goodenia hartiana* occurs in the vicinity, but does not occur in the impact area. Disturbance to this species should be avoided wherever possible" (CALM 2006).

Considering all of the above, it is unlikely that the proposed clearing will be at variance to this principle.

Methodology

CALM (2006).
GIS Database-Declared Rare and Priority Flora List- CALM 07/11/2005.
MBS Environmental (2006a).
MBS Environmental (2006b).

(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) identified in, or near, the area proposed for clearing. Therefore the proposal is not likely to be at variance with this principle (CALM, 2005). CALM concurred with the assessment provided by DoIR and stated that: it would appear unlikely that this proposal would be at variance to any of the relevant biodiversity principles (CALM 2006).

Methodology

CALM (2005)
CALM (2006).
GIS Database: Threatened Ecological Communities - CALM 12/04/2005.
MBS Environmental, 2005

(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 likely to be at variance to this Principle

The vegetation to be cleared is Beard Vegetation Association #134 (Hopkins et al. 2001) and according to Shepherd et al. (2001) approximately 100% of the pre-European extent is remaining. As the vegetation type covers 26 million hectares and remains largely uncleared, the proposal is not likely to be at variance to this principle (CALM, 2005)

All areas cleared will be rehabilitated with local provenance species (MBS Environmental, 2005).

Methodology

CALM (2005)
GIS Database-Pre-European extent-DA 01/01
Hopkins et al. (2001).
Shepherd et al. (2001).

(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

There are no wetlands or natural watercourses within the proposed area of clearing (GIS Database, MBS Environmental, 2006a). Therefore, the proposal is not at variance to this principle.

Methodology

GIS Database: Hydrography, linear - DOE 1/2/04
MBS Environmental, (2006a).

(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

Advice from the Commissioner for Soil and Land Conservation (DAWA 2006) dated 9 March 2006 stated in part:

The area proposed to be cleared has been mapped as the Little Sandy Desert Land System. This land system is susceptible to wind erosion if protective vegetative cover is removed. The proposed clearing to construct a heap leach pad is unlikely to lead to land degradation in the form of soil erosion.

Although the land tends to be internally drained, flooding is liable to occur if adequate provisions are not made to manage surface water flows from the minesite and adjacent areas, following heavy rains.

Prolonged inundation is liable to lead to loss of native vegetation. Therefore it is concluded that the proposal may be at variance with principle (g) for flooding.

While conditions that require the management of flooding cannot be imposed under this permit, it is noted that the proponent intends submitting detailed management measures to deal with this issue through the NOI process with Department of Industry and Resources.

Methodology

DAWA Advice, 2006.

(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 Rudall River National Park is located about 78km from the area proposed for clearing (GIS Database). There are no other existing or proposed conservation areas in proximity to the area.

Although only 3.3% of the pre-European extent of vegetation within the Great Sandy Desert IBRA region occurs within CALM Estate, these widely occurring vegetation associations do not appear to be at significant risk from the proposed clearing activities (CALM, 2005).

CALM concurred with the assessment provided by DoIR and stated that: it would appear unlikely that this proposal would be at variance to any of the relevant biodiversity principles (CALM 2006).

Methodology

CALM (2005)
CALM (2006).
GIS Database - CALM Managed Lands and Waters - CALM 1/07/05
GIS Database - Proposed National Parks, FMP - CALM 19/03/03

(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 *Rights in Rivers and Irrigation* (RIWI) *1914 Act* area or a Public Drinking Water Source Area (GIS Database). There are no waterbodies within the clearing permit area or nearby and as a result the clearing is unlikely to lead to a decrease in water quality of waterbodies either on or off the site of clearing. The potential changes to pH, salinity or ground water regimes due to the clearing are likely to be insignificant compared to the effects of the mine operation nearby and associated dewatering operations.

Groundwater and surface water quality at BNCO is monitored via an ongoing program that has been in place for over ten years. The impacts of any activities associated with the operation, including the removal of vegetation is monitored as part of the conditions of mining placed on the tenement. Groundwater abstraction and monitoring are undertaken in accordance with a Groundwater Operating Strategy (MBS Environmental, 2005). While the current Groundwater Operating Strategy and associated monitoring has been deemed

inadequate by DoE, both are in the process of being revised and are likely to be approved in the near future (K Barr, Environmental officer DoE North West Region, pers comm. 15 May 2006).

Methodology GIS Database - RIWI Act areas - WRC 05/04/02.
GIS Database - Public Drinking Water Source Areas - DoE 07/02/06.
MBS Environmental, 2005.

(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

While there are no natural waterways in the proposed area (GIS Database) low lying swales are subject to occasional natural flooding from extreme cyclonic events. However the removal of vegetation is not expected to exacerbate the incidence of flooding (MBS Environmental 2005) therefore the proposal is not likely to be at variance to this principle.

The Commissioner for Soil and land Conservation (DAWA 2006) has expressed the view that conditions to manage surface waterflows from the minesite and adjacent areas should be investigated at the grant of the Notice of Intent (NoI) due to the potential for prolonged inundation to lead to loss of native vegetation. Heap Leach Pad 7 (HL7) and the associated infrastructure will be engineered such that all surface water will be directed to either the processing ponds associated with HL7 or the storm water ponds. A site wide stormwater management plan has been implemented to effectively deal with large rainfall events in the future (MBS 2006a).

Methodology GIS Database: Hydrography linear - DOE 1/2/04
MBS Environmental, 2005

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

Comments

There is a Native Title determination over the area by the Martu peoples (WAG6110_98). BNCO holds a valid mining lease over the area proposed for disturbance so the granting of a clearing permit is not deemed a future act under the *Native Title Act 1993.*

The Birla Nifty mine on AM70/271 has a current water licence GWL66212(4) for mining camp purposes granted in accordance with the *Rights and Water Irrigation Act 1914.* There are 2 additional pending Ground Water Licenses, 102247(5) for the purpose of dewatering and 66213(3) for the purpose of mineral ore processing, which were previously issued to BNCO. Those licenses have not been renewed until such time as the licensee conducts a groundwater monitoring review, revises the groundwater operating strategy and receives subsequent approvals from the Department of Environment. This position was taken as a result of the unacceptable monitoring network employed by BNCO. However BNCO has been allowed to continue under the old licences while the review is conducted. (Anne Trevenna, DoE Program Manager North West Region, pers comm. 16/5/ 2006). The consultancy firm URS have completed the Groundwater Monitoring Review and revised the Operating Strategy for BNCO. The DoE North West region is waiting for advice from the Senior Hydrogeologist North West regarding the reports however It is likely that the pending licences will be issued in the near future (Kate Barr, Environmental Officer, DoE North West Region, pers comm. 16/5/2006).

The Birla Nifty mine has a current operating licence (Lic: 6617/10). An application for a Works Approval will need to be assessed and may be required for building a heap leach pad (DoE 2006).

Methodology GIS Database: Native Title Claims - DLI 19/12/04

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Mineral Production	Mechanical Removal	25	**Grant**	The proposal is judged not at variance to principle e and f and unlikely to be at variance to principles a,b,c,d,g,h,I and j. Therefore the assessing officer recommends that the permit should be granted. The proponent has stated that the vast majority of the clearing (21 out of 25 hectares) will take place within the area degraded by a previous acid spill. The Commissioner for Soil and land Conservation (DAWA 2006) has expressed the view that conditions to manage surface waterflows from the minesite and adjacent areas should be investigated at the grant of the Notice of Intent (NoI) due to the potential for prolonged inundation to lead to loss of native vegetation. While an NoI for the Leach Pad construction has not been received as yet by DoIR, that recommendation has been forwarded to the DoIR Environmental Officer responsible for the Birla Nifty Copper Operation.

The DoIR Native Vegetation Assessor has set 2 conditions to monitor the extent of the clearing over the life of the permit.

5. References

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CALM (2006) Land clearing proposal advice. Email advice to Department of Industry and Resources for Birla Nifty Purpose Clearing permit 1059/1. Department of Conservation and Land Management, Clearing Assessment Unit, Western Australia.

CALM Land clearing proposal advice for CPS 1059/1. Email advice sent on 21 April 2006 to Native Vegetation Assessor, Department of Environment (DoIR) from the Clearing Assessment unit of the Department of Conservation and Land Management, Western Australia.

DAWA (2006) Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture Western Australia. Advice received for Clearing permit 1059/1 Birla Nifty Pty Ltd, dated 9 March 2006.

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MBS Environmental (2006a) Purpose Permit Application for Construction of Heap Leach pad 7: Assessment of clearing principles. Unpublished report prepared for Birla Nifty Pty Ltd, January 2006.

MBS Environmental (2006b) Vegetation Survey and Targeted Rare Flora and Fauna Search of the Waste Rock Dump, Airstrip and Heap Leach pad Extension Areas, Nifty Copper Operations, Western Australia. Unpublished report prepared for Birla Nifty Pty Ltd, January 2006.

Mc Alpin S. (2001) The Recovery Plan for the Great Desert Skink (*Egernia kintorei*) 2001-2011. Report prepared by Steve Mc Alpin on behalf of the Arid Lans Environment Centre, published by the Department of Environment and Heritage.

Read J. (1998) Vertebrate Fauna of the Nifty Region, Great Sandy Desert, with comments on the impacts of Mining and Rehabilitation', The West Australian Naturalist. vol 22, no 1.

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6. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government.
CALM	Department of Conservation and Land Management, Western Australia.
DAWA	Department of Agriculture, Western Australia.
DA	Department of Agriculture, Western Australia.
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.
DoIR	Department of Industry and Resources, Western Australia.
DOLA	Department of Land Administration, Western Australia.

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.