Government of Western Australia
Department of Mines and Petroleum

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 3446/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: **Cliffs Asia Pacific Iron Ore Pty Ltd**

1.3. Property details

Property: Mining Lease 77/1039
Local Government Area: Shire of Yilgarn
Colloquial name: Windarling Operations

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
8.48		Mechanical Removal and Burning	Firebreak

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 and are useful to look at vegetation extent in a regional context. The following Beard Vegetation Association is located within the application area (GIS Database):

18: Low woodland; mulga (*Acacia aneura*).

Western Botanical undertook a vegetation survey over the application area on the 21 October 2009. The following six vegetation communities were recorded within the application area (Western Botanical, 2009):

1. *Eucalyptus longissima* Woodland;

2. *Eucalyptus corrugata* Woodland;

3. Ridge Line Community of *Melaleuca leiocarpa* and *Allocasuarina acutivalvis;*

4. Mixed Eucalypts with occasional *Casuarina pauper;*

5. *Eucalyptus loxophleba* subsp. *lissophloia* with *Acacia* species; and

6. Open Broad Drainage Mulga Woodland.

Clearing Description
Based on advice received from the Department of Environment and Conservation, Cliffs Asia Pacific Iron Ore has applied to clear 8.48 hectares of native vegetation for the purpose of constructing a firebreak (Cliffs Asia Pacific Iron Ore, 2009a). The firebreak will be located at the companies Windarling Mine located approximately 90 kilometres north of Koolyanobbing (GIS Database).

The firebreak will firstly be chained during early summer and then the remaining shrubs and vegetation will be burnt off during winter (Cliffs Asia Pacific Iron Ore, 2009a).

Vegetation Condition
Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994).

to

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

Comment
The vegetation condition was assessed by the assessing officer based on information provided by Cliffs Asia Pacific Iron Ore (2009a; 2009c).

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 is located within the Southern Cross subregion of the Coolgardie Interim Biogeographical Regionalisation of Australia (IBRA) bioregion (GIS Database). At a broad scale, vegetation can be described as Eucalyptus woodlands rich in endemic eucalypts around chains of saline playa-lakes, *Borya constricta* with stands of *Acacia acuminata* and *Eucalyptus loxophleba* on mid-levels of granite basement outcrops with

mallees and scrubheaths on the uplands (CALM, 2002).

Western Botanical conducted a flora and vegetation survey over the application area on the 21 October 2009. The survey identified six vegetation communities within the application area (Western Botanical, 2009). The condition of these vegetation communities has been assessed as ranging from 'very good' to 'good'. The application area has been previously disturbed by exploration drilling (Cliffs Asia Pacific Iron Ore, 2009a).

The flora survey recorded 104 flora species within the application area (Western Botanical, 2009). One species of Priority Flora, *Daviesia purpurascens* (Priority 4) was recorded within the application area (Western Botanical, 2009). There were 16 individuals recorded within the application area (Western Botanical, 2009). A further 60 individuals were recorded from outside the application area (Western Botanical, 2009). Given this, the removal of 16 individuals is not likely to have a significant impact on biodiversity in the local area.

The application area is within the boundary of the Priority Ecological Community (PEC) Windarling Ranges vegetation complex (banded ironstone formation) (GIS Database). The vegetation within the application area lies off the higher ridges on the surrounding plains (Harris, 2009). Given this PEC is associated with banded ironstone formation, it is not expected that this PEC will be impacted by the proposed clearing.

Fauna surveys of the Windarling Range and nearby Mt Jackson Range have recorded the presence of 2 amphibian species, 55 reptile species, 103 bird species and 30 mammal species (Cliffs Asia Pacific Iron Ore, 2009b). The Tree-stem Trapdoor Spider (Schedule 1 - fauna that is rare or likely to become extinct, *Wildlife Conservation (Specially Protected Fauna) Notice, 2008*) is expected to occur within the application area (Harris, 2009). The vegetation communities within the application area are common throughout the region and the application area is not likely to have a higher level of faunal diversity than surrounding area (Cliffs Asia Pacific Iron Ore, 2009c).

The Windarling Range has been classified as being an area of high biodiversity (Government of western Australia, 2007). However, the application area does not occur on the higher ridges of the banded ironstone formation and is expected to have lower biodiversity than the range (Harris, 2009). Given this, and that there has been previous disturbance, the application area is not expected to have a higher biodiversity than surrounding areas.

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

Methodology

CALM (2002)
Cliffs Asia Pacific Iron Ore (2009a)
Cliffs Asia Pacific Iron Ore (2009b)
Cliffs Asia Pacific Iron Ore (2009c)
Government of Western Australia (2007)
Harris (2009)
Western Botanical (2009)
GIS Database
- Interim Biogeographic Regionalisation of Australia (subregions)
- Threatened Ecological Sites
- Threatened Ecological Sites Boundaries

(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

Aprasia Wildlife was commissioned by Cliffs Asia Pacific Iron Ore to conduct targeted searches for Malleefowl (*Leipoa ocellata*) and the Tree-stem Trapdoor Spider (*Aganippe castellum*) (Harris, 2009). The searches were undertaken on 11 October 2009 (Harris, 2009).

Several Malleefowl ('Vulnerable' under the *Environment Protection and Biodiversity Conservation* (EPBC) *Act 1999* and Schedule 1 'Fauna that is rare or is likely to become extinct', *Wildlife Conservation (Specially Protected Fauna) Notice 2008*) mounds have been recorded on the nearby Mt Jackson Ranges (Harris, 2009). There is one known active Malleefowl mound approximately five kilometres north-west of the application area (Harris, 2009). The preferred habitat of the Malleefowl is tall mallee, low woodland or Acacia scrub with sandy soils and abundant litter to construct its nests with (Burbidge and Blyth, 2008). The majority of the application area searched consisted of open, sparse Eucalyptus woodland with little understorey (Harris, 2009). No evidence of Malleefowl was recorded during the survey and whilst this habitat type may be used for foraging, it does not appear to be favourable for nesting (Harris, 2009).

The Tree-stem Trapdoor Spider (Schedule 1 - fauna that is rare or likely to become extinct, *Wildlife Conservation (Specially Protected Fauna) Notice, 2008*) has been recorded across a wide area within the Yilgarn region (Harris, 2009). This species is known to exist to the north-east of the application area (Harris, 2009). No Tree-stem Trapdoor Spider burrows were recorded during the search (Harris, 2009). Whilst no burrows were found during the search, given this species has been recorded in high numbers in various habitats within the region, it is anticipated that it occurs within the application area, albeit in very low densities (Harris, 2009). The proposed clearing is likely to impact on individuals of this species, however, given it is present in very low numbers, the proposed clearing is not likely to have a significant impact. Cliffs Asia Pacific

Iron Ore will have to acquire a permit to take Tree-stem Trapdoor Spider burrows and individuals from the Species and Communities Branch of the Department of Environment and Conservation (DEC).

There is the potential for other fauna species of conservation significance to be present within the application area. However, given the vegetation has suffered previous disturbance and there are large areas of similar habitat present in the nearby Mount Manning Range Conservation Park and Nature Reserve (GIS Database) the proposed clearing is not likely to represent significant habitat for indigenous fauna species.

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

Methodology Burbidge and Blyth (2008)
Harris (2009)
GIS Database
- DEC Tenure
- Pre-European Vegetation

(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 Declared Rare Flora (DRF) species within the application area (GIS Database). There are three records of DRF within 2 kilometres of the application area (GIS Database). Western Botanical (2009) conducted a flora survey over the application area on 21 October 2009. No DRF was recorded within the application area (Western Botanical, 2009).

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

Methodology Western Botanical (2009)
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**
According to available databases, there are no Threatened Ecological Communities (TEC's) within the application area (GIS Database). The vegetation survey did not identify any vegetation types described as a TEC (Western Botanical, 2009).

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

Methodology Western Botanical (2009)
GIS Database
- Threatened Ecological Sites
- Threatened Ecological Sites Boundaries

(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 is within the Interim Biogeographic Regionalisation of Australia (IBRA) Coolgardie bioregion (GIS Database). According to Shepherd (2007) there is approximately 98.42% of the Pre-European vegetation remaining in the Coolgardie bioregion (see table).

The vegetation of the application area has been mapped as (GIS Database):

- Beard Vegetation Association 18: Low woodland; mulga (*Acacia aneura*).

According to Shepherd (2007) approximately 100% of Beard Vegetation Association 18 remains at both a state and bioregional level. The area proposed to clear does not represent a significant remnant of native vegetation in the local or wider regional area. The proposed clearing will not reduce the extent of Beard Vegetation Association 18 below the current recognised threshold level of 30% of the pre-clearing extent of the vegetation type (below which species loss accelerates exponentially at an ecosystem level) (Shepherd et al., 2001).

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in IUCN Class I-IV Reserves (and post clearing %)*
IBRA Bioregion – Coolgardie	12,912,204	12,707,619	~98.42	Least Concern	10.87 (11.04)
Beard veg assoc. – State					
18	19,892,305	19,890,195	~100	Least Concern	2.1 (2.1)
Beard veg assoc. – Bioregion					
18	15,974	15,974	~100	Least Concern	21 (21)

* Shepherd (2007)
** Department of Natural Resources and Environment (2002)

Options to select from: Bioregional Conservation Status of Ecological Vegetation Classes (Department of Natural Resources and Environment 2002)

Presumed extinct	Probably no longer present in the bioregion
Endangered+	<10% of pre-European extent remains
Vulnerable+	10-30% of pre-European extent exists
Depleted+	>30% and up to 50% of pre-European extent exists
Least concern+	>50% pre-European extent exists and subject to little or no degradation over a majority of this area

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

Methodology Department of Natural Resources and Environment (2002)
Shepherd et al. (2001)
Shepherd (2007)
GIS Database
- Interim Biogeographic Regionalisation of Australia
- 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 survey did not record any vegetation growing in association with a watercourse or wetland (Western Botanical, 2009).

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

Methodology Western Botanical (2009)
GIS Database
- 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**
Land system mapping by the Department of Agriculture Western Australia has mapped a variety of land systems for Western Australia. Land systems are mapped based on biophysical features such as soil and landform type, geology, geomorphology and vegetation type (Payne, et. al., 1998). The proposed clearing area includes two land systems (GIS Database). A broad description is given below (Payne et al., 1998):

Moriarty Land System: This land system is characterised by low greenstone rises and stony plains supporting halophytic and Acacia shrublands with patchy Eucalypt overstories. The vegetation of this land system is highly preferred for grazing making it susceptible for overgrazing and consequent degradation. The application area is located on the Diemals Station and may have been grazed in the past (GIS Database). Given the proposed clearing is now adjacent to an existing mine it would not be expected the area is used for pastoral activities.

Tealtoo Land System: This land system is characterised by level to gently undulating loamy plains with fine ironstone lag gravel supporting dense Acacia shrublands. The vegetation types on this system are not particularly preferred by grazing animals and generally not degraded. This system is not generally prone to soil erosion.

At a broad scale the surface soil pH of the application area ranges from 5.5 to 6.5 (CSIRO, 2009). There is no known occurrence of acid sulphate soils within the application area (CSIRO, 2009). The application area appears to be relatively flat and the soils contain variable amounts of ironstone gravel, which will help minimise the chance of water erosion occurring (GIS Database).

The average annual evaporation rate is over 9 times greater than the average annual rainfall, so it is unlikely the proposed clearing will result in increased groundwater recharge causing rising saline water tables (GIS Database).

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

Methodology CSIRO (2009)
Payne et al. (1998)
GIS Database
- Evaporation Isopleths
- Pastoral Leases
- Rainfall, Mean Annual
- Rangeland land system mapping
- Soils, statewide
- Topographic Contours, Statewide

(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**
According to available databases, the proposed clearing is not within any conservation areas (GIS Database). The nearest conservation area is the Mount Manning Range Conservation Park located approximately 6.5 kilometres east of the application area (GIS Database). The proposed clearing is not likely to impact on any ecological linkages to the Mount Manning Range Conservation Park.

The application area is located on the Diemals Station, which is set to be acquired by the Department of Environment and Conservation in 2015. It is not expected that the proposed clearing will have a significant impact on the environmental values of this future conservation area.

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

Methodology GIS Database
- CALM proposed 2015 pastoral lease exclusions
- 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).

Groundwater within the application area is saline, between 7,000 – 14,000 milligrams per litre of Total Dissolved Solids (TDS) (GIS Database). Given the groundwater is already saline, any clearing is unlikely to have an effect on groundwater quality.

There are no permanent or ephemeral waterbodies located within the application area (GIS Database). The nearest waterbody to the application area is a non-perennial lake located approximately 8 kilometres south of the application area (GIS Database). Given there is a low average rainfall (300 millimetres) and there are no watercourses within the application area, the proposed clearing is not likely to cause sedimentation or deteriorate the quality of surface water in the nearby areas (GIS Database).

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

Methodology GIS Database
- Groundwater Salinity
- Rainfall, Mean Annual
- Public Drinking Water Source Areas (PDWSA's)
- 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 receives an average rainfall of approximately 300 millimetres (GIS Database). Based on an average annual evaporation rate of 2,800 – 3,000 millimetres (GIS Database), any surface water resulting

from rainfall events is likely to be relatively short lived.

There are no watercourses or wetlands within the application area (GIS Database). Given this and that the application area is relatively flat, the proposed clearing is not likely to increase the incidence or intensity of flooding.

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

Methodology GIS Database
- Evaporation Isopleths
- Hydrography, linear
- Rainfall, Mean Annual

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

Comments

The permit application was advertised by the Department of Mines and Petroleum, inviting submissions from the public. There were no submissions received.

There is one native title claim over the area under application; WC99/029 (GIS Database). This claim has been registered with the National Native Title Tribunal. However, the mining 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.*

According to available databases, there are no 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 throughout 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 licence or approvals are required for the proposed works.

Methodology GIS Database
- Aboriginal Sites of Significance
- Native Title Claims

4. Assessor's comments

Comment

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

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

5. References

Burbidge and Blyth (2008) Threatened and Rare Birds of Western Australia (revised reprint). Department of Environment and Conservation, Kensington, Western Australia.

Cliffs Asia Pacific Iron Ore (2009a) Application for a Clearing Permit for the purposes of creating a Firebreak. Unpublished report prepared by Cliffs Asia Pacific Iron Ore Pty Ltd, Western Australia.

Cliffs Asia Pacific Iron Ore (2009b) Koolyanobbing Iron Ore Project - Mt Jackson J1 Deposit Environmental Protection and Biodiversity Conservation Act 1999 Environmental Impact Assessment. Prepared for Cliffs Asia Pacific Iron Ore Pty Ltd by Globe Environments Australia Pty Ltd.

Cliffs Asia Pacific Iron Ore (2009c) Additional information supplied for clearing permit application CPS 3446/1. Received by the assessing officer on 2 December 2009.

Commonwealth Scientific and Industrial Research Organisation (2009) Australian Soil Resource Information System. Available online at: http://www.asris.csiro.au/index_ie.html Accessed on 13 December, 2009.

Department of Conservation and Land Management (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions.

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.

Government of Western Australia (2007) Strategic Review of the Conservation and Resource Values of the Banded Iron Formations of the Yilgarn Craton. Published jointly by the Department of Environment and Conservation and the Department of Industry and Resources, Perth, Western Australia.

Harris, I. (2009) Malleefowl (*Leipoa ocellata*) and Tree-stem Trapdoor Spider (*Aganippe castellum*). Assessment of Proposed Fire Break (Windarling). Unpublished report for Cliffs Asia Pacific Iron Ore Pty Ltd by Aprasia Wildlife, Bibra Lake, Western Australia.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Payne, A.L., Van Vreeswyk, A.M.E., Pringle, H.J.R., Leighton, K.A., and Hennig, P. (1998) An inventory and condition survey of the Sandstone-Yalgoo-Paynes Find area, Western Australia. Department of Agriculture, 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. Includes subsequent updates for 2006 from Vegetation Extent dataset ANZWA1050000124.

Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.

Western Botanical (2009) Supporting documentation for clearing permit application CPS 3446/1. Unpublished report for Cliffs Asia Pacific Iron Ore Pty Ltd, 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.