



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 2725/3
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Hamersley Iron Pty Ltd

1.3. Property details

Property: Iron Ore (Mount Bruce) Agreement Act 1972, Mineral Lease 252SA (AML 70/252);
Local Government Area: Shire of Ashburton & Shire of East Pillbara
Colloquial name: Koodaideri Exploration Project

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 4 June 2015

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description Beard vegetation associations have been mapped for the whole of Western Australia and are useful to look at vegetation in a regional context. Two Beard vegetation associations have been mapped within the application area:

82: Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana*; and

111: Hummock grasslands, shrub steppe; *Eucalyptus gamophylla* over hard spinifex (Shepherd, 2007).

A vegetation survey was conducted over the application area by Pilbara Iron staff and Biota Environmental Sciences over a five month period in 2007. As a result of this survey, 34 vegetation types were identified within the survey area (Pilbara Iron, 2007). These are:

VEGETATION OF STONEY HILLS:

1. Stony ridge: *Eucalyptus leucophloia* open low trees over *Acacia hamersleyensis* scattered tall shrubs over *Grevillea wickhamii* scattered shrubs, over *Triodia wiseana* hummock grasslands over *Eriachne mucronata*, *E. lanata* tussock grasslands on skeletal red clay soil with stony surface.

2. Stony ridge: *Eucalyptus leucophloia*, *Acacia pruinocarpa* scattered low trees over *Triodia basedowii* hummock grassland on skeletal clay soil with rocky surface layer.

3. Rocky sloping outcrop: *Eucalyptus leucophloia* low woodland over *Acacia monticola* scattered tall shrubs over *Acacia spondylophylla* low shrubs over *Triodia wiseana* hummock grasslands over *Eriachne mucronata* tussock grassland on skeletal clay soil with surface boulders.

4. Steep stony slopes: *Corymbia ferritcola* scattered low trees over *Acacia inaequilatera*, *Grevillea wickhamii* tall shrubs over *Acacia bivenosa* scattered shrubs over *Triodia basedowii*, *T. wiseana* closed hummock grassland on skeletal clay soils with stony surface.

5. Gentle sloping flat hills: *Corymbia hamersleyana* scattered low trees over *Grevillea wickhamii* scattered shrubs over *Tephrosia arenicola*, *Acacia arida* low shrubs over *Triodia wiseana*, *T. basedowii* hummock grassland on skeletal clay soils overlying ironstone bedrock.

6. Rocky slopes: *Eucalyptus leucophloia*, *Acacia pruinocarpa* over open low trees over *Acacia tumida* scattered shrubs over *Themeda triandra* tussock grassland on skeletal clay soils with surface of rocks and boulders < 1m.

7. Burnt hilltops: *Eucalyptus leucophloia*, *Corymbia hamersleyana* scattered low trees over *Petalostylis labicheoides*, *Acacia pruinocarpa* scattered low shrubs over *Tephrosia arenicola*, *Gompholobium karjini* scattered shrubs on skeletal clay soils overlying ironstone bedrock.

8. Gentle sloping hilltops: *Eucalyptus leucophloia*, *E. gamophylla* low scattered trees over *Acacia arida* scattered shrubs over *Acacia arida*, *A. spondylophylla* scattered low shrubs over *Triodia basedowii* hummock grassland on skeletal clay soils overlying ironstone bedrock.

9. Gentle sloping broad valley: *Eucalyptus leucophloia*, *Corymbia hamersleyana* scattered low trees over *Grevillea wickhamii* tall shrubland over *Acacia spondylophylla*, *Indigofera monophylla* open low shrubland over *Triodia basedowii* hummock grassland on skeletal clay soils with stony surface layer.

10. Flat hilltops: *Eucalyptus leucophloia*, *Corymbia hamersleyana*, *Acacia pruinocarpa* scattered low trees over *Acacia marramamba* scattered tall shrubs over *Eremophila forrestii* scattered shrubs over *Triodia epactia* hummock grassland on skeletal clay soils with stony surface layer.

11. Burnt gullies: *Eucalyptus leucophloia* scattered low trees over *Gompholobium karjini* scattered low shrubs over herb strata including *Trachymene oleracea*, *Dampiera candidans* and *Goodenia cusackiana*.

12. Flowline: *Corymbia hamersleyana* scattered low trees over *Acacia tumida*, *Petalostylis labicheoides* closed low shrubs (thicket) on sandy clay with thin loam surface.

13. Stony valley: *Eucalyptus leucophloia*, *Corymbia hamersleyana* scattered low trees over *Sida arenicola* open tall shrubs over *Gossypium australe* open shrubs over *Triodia basedowii* hummock grassland on skeletal clay soil with surface layer of boulders <1m.

14. Burnt stony slopes: *Eucalyptus leucophloia*, *Corymbia ferritcola* scattered low trees over *Grevillea wickhamii*, *Acacia inaequilatera* scattered low shrubs over *Trachymene oleracea* herbs on skeletal clay soil overlying ironstone bedrock.

15. Edge of gorge: *Acacia aneura*, *A. pruinocarpa* scattered low trees over *Eremophila latrobei* ssp. *latrobei*, *Tephrosia arenicola* scattered shrubs over *Triodia epactia* hummock grassland on skeletal clay soil overlying ironstone bedrock.

16. Steep gullies, burnt: *Eucalyptus leucophloia* scattered low trees over *Acacia hamersleyensis* scattered tall shrubs over *Trachymene oleracea* herbs on skeletal clay soil with surface layer of boulders <1m.

17. Broad stony valley: *Grevillea wickhamii*, *Acacia tumida* scattered low shrubs over *Triodia basedowii* scattered hummock grassland on skeletal clay soil with stony surface layer.

18. Stony plain: *Triodia basedowii* hummock grassland on stony clay.

19. Gentle slope: *Eucalyptus leucophloia* low open woodland over *Grevillea wickhamii* scattered tall shrubs over *Acacia arida*, *Tephrosia arenicola* shrubs over *Acacia spondylophylla* scattered low shrubs over *Triodia basedowii* hummock grassland on stony clay.

20. Flow line, burnt: *Eucalyptus gamophylla* scattered low trees over *Dicrastylis georgei* scattered shrubs over *Acacia tumida* low shrubs over *Scaevola parvifolia* scattered herbs on stony clay with surface bulldust layer.

VEGETATION OF GORGES:

1. Gorge: *Corymbia ferritcola*, *Acacia aneura*, *A. pruinocarpa* scattered low trees over *Themeda triandra*, *Eriachne mucronata* tussock grassland on skeletal sandy clay soil with surface of boulders.

2. Gorge: *Corymbia ferritcola*, *Acacia pruinocarpa*, *A. aneura* low open woodland over *Acacia tumida*, *Clerodendrum floribundum* scattered tall shrubs over *Triumfetta leptacantha* scattered shrubs over *Themeda triandra* tussock grassland on red-brown sand with surface layer of boulders <5m.

3. Permanent creek: *Eucalyptus camaldulensis* var. *obtusata* closed forest over *Typha domingensis*, *Cyperus vaginatus* scattered herbs sedgeland over *Cenchrus ciliaris* closed tussock grassland over *Rhynchosia bungarensis* scattered herbs on red-brown clay loam.

VEGETATION OF MAJOR DRAINAGE PLAINS:

1. Gently undulating upper broad flood plain: *Corymbia deserticola* open low woodland over *Hakea chordophylla* scattered tall shrubland over *Grevillea wickhamii*, *Dicrastylis georgei* open low shrubland over (alternating) low lying *Acacia tumida*, *Senna notabilis* and *Goodenia stobbsiana* and slightly raised *Gompholobium karjini*, *Ptilotus calostachyus*, *Indigofera monophylla* on clay; slightly elevated areas with stony surface, low lying areas clayey sand.

2. Lower drainage plain: *Corymbia hamersleyana* scattered low trees over *Grevillea wickhamii*, *Acacia inaequilatera* scattered shrubs over various ephemeral herb layer on stony clay.

3. Broad flood plain: *Corymbia hamersleyana* scattered low trees over *Grevillea wickhamii*, *Acacia inaequilatera*, *Clerodendrum floribundum* scattered shrubs over *Cenchrus ciliaris* closed tussock grassland over stony clay.

4. Burnt flood plain: *Corymbia hamersleyana* scattered low trees over *Grevillea wickhamii* tall shrubs over *Cenchrus ciliaris* closed tussock grassland over *Bidens bipinnata* scattered herbs on red-brown stony clay.

5. Unburnt flood plain: *Acacia marramamba*, *Grevillea wickhamii* scattered tall shrubs over *Senna artemisioides* ssp. *oligophylla*, *S. artemisioides* ssp. *helmsii* scattered shrubs over *Tephrosia rosea* var. *glabrior*, *Corchorus lasiocarpus* scattered low shrubs over *Triodia epactia* hummock grassland over *Bidens bipinnata* scattered herbs on red-brown stony clay.

6. Major drainage gully: *Corymbia hamersleyana*, *Acacia tumida* open low trees over *Acacia tumida*, *Grevillea wickhamii*, *Petalostylis labicheoides* open tall shrubs over *Acacia dictyophleba*, *Gossypium australe* open shrubs over *Eremophila longifolia* open low shrubs over *Triodia epactia* open hummock grassland over *Cenchrus ciliaris* closed tussock grassland on red-brown sandy clay.

7. Flood plain: *Grevillea wickhamii* tall shrubs over *Clerodendrum floribundum* scattered shrubs over *Acacia inaequilatera*, *Grevillea wickhamii* low shrubs over *Cenchrus ciliaris* tussock grassland on stony clay.

VEGETATION OF PLAINS:

1. Stony plain: *Eucalyptus leucophloia*, *Corymbia hamersleyana* scattered low trees over *Acacia inaequilatera*, *A. tumida* scattered shrubs over *Triodia basedowii* hummock grassland over *Aristida contorta* scattered tussock grassland on stony clay.

2. Gently sloping plain: *Grevillea wickhamii* tall shrubs over *Triodia epactia* hummock grassland on stony clay.

VEGETATION OF BROAD VALLEYS:

1. Dry Stony Creek: *Corymbia hamersleyana* scattered low trees over *Acacia tumida*, *Grevillea wickhamii* tall shrubs over *Gossypium robinsonii* scattered shrubs over *Triodia epactia* hummock grassland over *Cenchrus ciliaris* tussock grassland on stony clay.

2. Broad Valley: *Corymbia hamersleyana* scattered low trees over *Grevillea wickhamii* tall shrubs over *Cenchrus ciliaris* closed tussock grassland on stony clay.

Clearing Description

Koodaideri Exploration Project

Hamersley Iron Pty Ltd proposes to clear up to 793 hectares of native vegetation within a total boundary of approximately 4,967 hectares for the purpose of mineral exploration. The project is located approximately 108 kilometres north-west of Newman, in the Shire of Ashburton and the Shire of East Pilbara.

Vegetation Condition

Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994);
to:

Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).

Comment

Clearing permit CPS 2725/1 was granted by the Department of Mines and Petroleum on 5 February 2009. The clearing permit authorised the clearing of 693 hectares of native vegetation within a total boundary of approximately 4,967 hectares.

Hamersley Iron Pty Ltd applied for an amendment to clearing permit CPS 2725/1 on 1 February 2010, to extend the timeframe to complete rehabilitation activities from 6 months to 12 months following clearing. The area of authorised clearing and the clearing area boundary that was approved under clearing permit CPS 2725/1 remained unchanged.

Hamersley Iron Pty Ltd applied for an amendment to clearing permit CPS 2725/2 on 30 March 2015, to extend the duration of the permit to 31 July 2025, and to increase the clearing limit from 693 hectares to 793 hectares.

3. Assessment of application against clearing principles

Comments

Hamersley Iron Pty Ltd has applied to increase the area of clearing by 100 hectares and extend the duration of the permit to 31 July 2025.

According to available databases and flora survey results, there are no Threatened flora, Priority Ecological Communities, or Threatened Ecological Communities present within the application area (Biota, 2007; Pilbara Iron, 2007; GIS Database).

A vegetation and rare flora survey was conducted over the application area and surrounding vegetation by Biota Environmental Sciences (Biota, 2007) between April and September 2007. As a result of this survey, a total of six Priority flora species were identified within the application area (Biota, 2007). Subsequent changes to the conservation status of these species have resulted in some of these species being removed from the Priority flora list. Three of these species remain on the Priority flora list (Western Australian Museum, 2015). They are:

Sida sp. Barlee Range (P3)
Eremophila magnifica spp. *magnifica* (P4)
Rhynchosia bungarensis (P4).

Sida sp. Barlee Range occurs on skeletal soils on hill slopes and in narrow gorges with steep cliff faces and scree slopes (Western Australian Herbarium, 2015). *Eremophila magnifica* spp. *magnifica* occurs in skeletal soils over ironstone (Western Australian Herbarium, 2015). Both of these species have been found throughout the Hamersley Ranges, and given the abundance of suitable habitat within the Pilbara region and the wide range across which these species have been found, it is not likely that the vegetation within the application area is significant habitat for these flora species.

Rhynchosia bungarensis occurs on pebbly, shingly coarse sand amongst boulders in creek lines and on floodplains, and has also been collected on ironstone slopes in skeletal soil (Western Australian Herbarium, 2015). It has been found across much of the Pilbara region. Within the application area *R. bungarensis* was

found in three separate populations, within a gorge adjacent to a permanent spring and within ephemeral watercourses (Biota, 2007). The population within the gorge was in excess of 1000 individual plants. The permanent water in the area of this population is likely to be supporting such a large population and as such it is likely to be significant habitat for this population. Hamersley Iron has advised that the area surrounding the permanent spring will be avoided during the exploration activity.

Biota (2007) also identified one individual plant of the flora species *Sauropus* aff. *trachyspermus*. Whilst not under any conservation threat, Biota (2007) suggests that this is a major range extension for this species which has previously been recorded from the Kimberley region (Western Australian Museum, 2015; Western Australian Herbarium, 2015), or that it may be a possible new species. Given there remains some unknown factors regarding this population it should be treated as being of conservation significance and should be avoided during exploration activities. Potential impacts to *Sauropus* aff. *trachyspermus* may be minimised through the implementation of a condition limiting clearing within a buffer area surrounding the population of *Sauropus* aff. *Trachyspermus*.

The Koodaideri Hills are characteristic of the Hamersley Ranges, with fauna habitats including hilltops, slopes, stony plains and small to moderate watercourses. Biota notes that there are no caves within the application area (Biota, 2008). Most of the habitat types found within the application area are common throughout the Hamersley Ranges and it is unlikely that the vegetation within the application area is significant habitat for conservation significant species (Biota, 2008; DEC, 2015; GIS Database). However, a permanent freshwater spring occurs within the application area. The habitat provided by this spring is unique within the Koodaideri Hills and is not common within the Hamersley Ranges. It is a significant fauna habitat, providing refuge for fauna species during dry conditions and a permanent water source. Hamersley Iron have committed to avoiding this permanent spring and the vegetation surrounding it during the exploration program.

The application area is dissected by several ephemeral watercourses that run after significant rainfall events, as is typical of the Pilbara region (GIS Database). A site inspection conducted by the assessing officer of CPS 2725/2 confirmed that most of these watercourses are dry ephemeral watercourses with no riparian vegetation fringing their banks. However, there is one gorge in which a permanent spring is located. This spring was flowing during the site inspection and supports a Eucalypt forest and fringing riparian vegetation of sedges, bulrushes and grasses. Biota (2007) have described this vegetation type as: *Eucalyptus camaldulensis* var. *obtusa* closed forest over *Typha domingensis*, *Cyperus vaginatus* sedgeland over *Cenchrus ciliaris* closed tussock grassland over *Rhynchosia bungarensis* scattered herbs. Potential impacts to the natural spring may be minimised through the implementation of a condition limiting clearing within a buffer area surrounding the spring.

The application area is within the Newman and Boolgeeda land systems (GIS Database). The Newman Land System is described as rugged jaspilite plateaux, ridges and mountains supporting hard spinifex grasslands (Van Vreeswyk et al, 2004). The system is not prone to erosion and has evolved to cope with vegetation loss following frequent fires. The Boolgeeda Land System is described as stony lower slopes and plains below hill systems supporting hard and soft spinifex grasslands and mulga shrublands (Van Vreeswyk et al, 2004). The vegetation within the system is not prone to degradation and the system is not susceptible to erosion (Van Vreeswyk et al, 2004).

The application area experiences low rainfall (311 mm/year) (BoM, 2015), and very high pan evaporation rates (~3400 mm/year) (BoM, 2015; GIS Database). Most rainfall will be either utilised by vegetation or lost through evaporation. Subsequently, there is little recharge of groundwater as a result of rain. As a result, the removal of 798 hectares of native vegetation within a 4,967 hectare application area is not likely to lead to a rise in water table, which can lead to waterlogging or salinisation.

The application area is located within a *Rights in Water and Irrigation Act*, 1914 (RIWI Act) Surface Water Management Area (DoW, 2008). The proponent is required to obtain a Beds and Banks Permit in order to disturb any water course (DoW, 2008). Given the size of the clearing (793 ha) compared with the size of the Fortescue River - Upper Catchment (2,975,192 ha), the proposed clearing is not likely to reduce the quality of surface water in the catchment (GIS Database).

The amendment to increase clearing from 693 hectares to 793 hectares within a boundary of 4,967 hectares is not likely to result in any significant change to the environmental impacts of the proposed clearing.

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 is at variance to Principle (f), may be at variance to Principles (a), (b), and (c), is not likely to be at variance to Principles (d), (g), (h), (i) and (j) and is not at variance to Principle (e). The assessment against the clearing Principles remains consistent with the assessment contained in decision report CPS 2725/2.

Methodology Biota (2007)
Biota (2008)
BoM (2015)
CALM (2002)
DEC (2015)
DoW (2008)

- Pilbara Iron (2007)
 Van Vreeswyk et al. (2004)
 Western Australian Museum (2015)
 GIS Database:
- Acid Sulfate Soil Risk Map, Pilbara Coastline
 - Pre-European Vegetation
 - Rangeland Land System Mapping
 - Threatened and Priority Flora
 - Threatened Ecological Sites Buffered

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

Comments

There are no native title claims over the application area (GIS Database; DAA, 2014). However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There 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 Regulation, the Department of Parks and Wildlife and the Department of Water, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

The amended application was advertised on 27 April 2015 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

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

4. References

- Biota (2007). Koodaideri Rare Flora and Vegetation Survey. Unpublished report prepared for Pilbara Iron Pty Ltd by Biota Environmental Sciences.
- Biota (2008). Koodaideri Camp and Infrastructure Areas: Native Vegetation Clearing Permit Report. Unpublished report prepared for Pilbara Iron Pty Ltd by Biota Environmental Sciences.
- BoM (2015) Climate Statistics for Australian Locations. A Search for Climate Statistics for Newman Aero, Australian Government Bureau of Meteorology, viewed 22 May 2015, <http://www.bom.gov.au/climate/averages/tables/cw_007176.shtml>.
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Pilbara 3 (PIL4 – Hamersley subregion) Department of Conservation and Land Management, Western Australia.
- DEC (2015) NatureMap - Mapping Western Australia Biodiversity, Department of Environment and Conservation, viewed 22 May 2015, <<http://naturemap.dec.wa.gov.au>>.
- DoW (2008). Advice for land clearing application. Advice to Assessing Officer, Native Vegetation Assessment Branch, Department of Industry and Resources (DoIR), received 21/1/08. Department of Water, 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.
- Pilbara Iron (2007) Botanical Advice From Environment Department, RTIO-HSE-0018572. Unpublished Report.
- 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.
- Van Vreeswyk, A.M.E., Payne, A.L., Leighton, K.A & Hennig, P. (2004) An Inventory and Condition Survey of the Pilbara Region, Western Australia, Department of Agriculture, Western Australia.
- Western Australian Museum (2015) FloraBase - The Western Australian Flora. Department of Environment and Conservation, viewed 22 May 2015, < <https://florabase.dpaw.wa.gov.au/>>

5. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia
DAFWA	Department of Agriculture and Food, Western Australia
DEC	Department of Environment and Conservation, Western Australia (now DPaW and DER)
DER	Department of Environment Regulation, Western Australia

DMP	Department of Mines and Petroleum, Western Australia
DRF	Declared Rare Flora
DotE	Department of the Environment, Australian Government
DoW	Department of Water, Western Australia
DPaW	Department of Parks and Wildlife, Western Australia
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities (now DotE)
EPA	Environmental Protection Authority, Western Australia
EP Act	<i>Environmental Protection Act 1986</i> , Western Australia
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Federal Act)
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
PEC	Priority Ecological Community, Western Australia
RIWI Act	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
s.17	Section 17 of the <i>Environment Protection Act 1986</i> , Western Australia
TEC	Threatened Ecological Community

Definitions:

{DPaW (2013) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

- T** **Threatened species:**
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna or the Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).

Threatened Fauna and Flora are further recognised by the Department according to their level of threat using IUCN Red List criteria. For example Carnaby's Cockatoo *Calyptorhynchus latirostris* is specially protected under the *Wildlife Conservation Act 1950* as a threatened species with a ranking of Endangered.

Rankings:
CR: Critically Endangered - considered to be facing an extremely high risk of extinction in the wild.
EN: Endangered - considered to be facing a very high risk of extinction in the wild.
VU: Vulnerable - considered to be facing a high risk of extinction in the wild.
- X** **Presumed Extinct species:**
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora (which may also be referred to as Declared Rare Flora).
- IA** **Migratory birds protected under an international agreement:**
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice.
Birds that are subject to an agreement between governments of Australia and Japan, China and The Republic of Korea relating to the protection of migratory birds and birds in danger of extinction.
- S** **Other specially protected fauna:**
Specially protected under the *Wildlife Conservation Act 1950*, listed under Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- P1** **Priority One - Poorly-known species:**
Species that are known from one or a few collections or sight records (generally less than five), all on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, Shire, rail reserves and Main Roads WA road, gravel and soil reserves, and active mineral leases and under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes.
- P2** **Priority Two - Poorly-known species:**
Species that are known from one or a few collections or sight records, some of which are on lands not under imminent threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, unallocated Crown land, water reserves, etc. Species may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes.
- P3** **Priority Three - Poorly-known species:**
Species that are known from collections or sight records from several localities not under imminent threat, or from few but widespread localities with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and known threatening processes exist that could affect them.
- P4** **Priority Four - Rare, Near Threatened and other species in need of monitoring:**
(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could

- be if present circumstances change. These species are usually represented on conservation lands.
- (b) Near Threatened. Species that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable.
 - (c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

P5

Priority Five - Conservation Dependent species:

Species that are not threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

Principles for clearing native vegetation:

- (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.
- (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.
- (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.
- (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.
- (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.
- (f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.
- (g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.
- (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.
- (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.
- (j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.