



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 5889/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: BHP Billiton Iron Ore Pty Ltd

1.3. Property details

Property: General Purpose Lease 47/12
General Purpose Lease 47/13
General Purpose Lease 47/14
General Purpose Lease 47/15
General Purpose Lease 47/16
General Purpose Lease 47/17
General Purpose Lease 47/18
General Purpose Lease 47/19
Miscellaneous Licence 47/118
Miscellaneous Licence 47/667

Local Government Area: Shire of East Pilbara
Colloquial name: Houghy's Way Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
141		Mechanical Removal	Construction and maintenance of access roads, accomodation, airport infrastructure and associated works

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 18 January 2018

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. The following Beard vegetation associations are located within the application area (GIS Database):

- 18: Low woodland; mulga (*Acacia aneura*) and
- 82: Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana*

The application area contains 18 vegetation associations, as described by ENV (2009):

- YFA01:** *Corymbia hamersleyana* open woodland over *Acacia tumida* var. *pilbarensis* open shrubland over *Corchorus lasiocarpus* subsp. *lasiocarpus*, *Dicrastylis cordifolia* and *Hybanthus aurantiacus* low open shrubland over *Triodia* sp. Shovelanna Hill very open hummock grassland;
- YFB06:** *Corymbia deserticola* subsp. *deserticola* and *Corymbia hamersleyana* low open woodland over *Acacia adoxa* var. *adoxo* and *Acacia hilliana* scattered shrubs over *Triodia* sp. Shovelanna Hill scattered hummock grasses;
- YFC02:** *Corymbia hamersleyana* scattered low trees over *Petalostylis labicheoides* and *Grevillea wickhamii* subsp. *hispidula* low open shrubland over scattered low shrubs over *Triodia epactia* very open hummock grassland;
- YFC04:** *Corymbia hamersleyana* low open woodland over *Petalostylis labicheoides*, *Acacia tumida* var. *pilbarensis* and *Rulingia luteiflora* low open shrubland over *Triodia epactia* and *Triodia* sp. Shovelanna Hill very open hummock grassland;
- YFD04:** *Corymbia hamersleyana* scattered low trees over *Gompholobium karijini* low open shrubland over *Triodia* sp. Shovelanna Hill scattered hummock grasses;

- YFB02:** *Corymbia hamersleyana* and *Eucalyptus leucophloia* subsp. *leucophloia* low open woodland over *Petalostylis labicheoides* open shrubland over *Acacia tumida* var. *pilbarensis*, *Rulingia luteiflora*, *Grevillea wickhamii* subsp. *hispidula* and *Dicrastylis cordifolia* low open shrubland over scattered tussock grasses over scattered herbs;
- YFA02:** *Corymbia hamersleyana* scattered trees over *Grevillea wickhamii* subsp. *hispidula* scattered tall shrubs over *Acacia hilliana* and *Acacia adoxa* var. *adoxo* low open shrubland over *Triodia* sp. Shovelanna Hill hummock grassland;
- YFA03:** *Eucalyptus leucophloia* subsp. *leucophloia* and *Corymbia hamersleyana* low open woodland over *Acacia inaequilatera* and *Grevillea wickhamii* subsp. *hispidula* open shrubland over *Triodia* sp. Shovelanna Hill very open hummock grassland over scattered herbs;
- YFA04:** *Grevillea wickhamii* subsp. *hispidula* and *Acacia tenuissima* scattered tall shrubs over *Acacia hilliana* and *Acacia adoxa* var. *adoxo* open shrubland over *Triodia* sp. Shovelanna Hill very open hummock grassland;
- YFB01:** *Corymbia deserticola* subsp. *deserticola* scattered low trees over *Grevillea wickhamii* subsp. *hispidula*, *Solanum phlomoides* and *Goodenia stobbsiana* low open shrubland over *Triodia* sp. Shovelanna Hill very open hummock grassland;
- YFB03:** *Corymbia hamersleyana* and *Eucalyptus leucophloia* subsp. *leucophloia* low open woodland over scattered low shrubs over *Triodia* sp. Shovelanna Hill very open hummock grassland;
- YFB04:** Scattered low shrubs over *Triodia* sp. Shovelanna Hill very open hummock grassland over scattered herbs;
- YFB05:** *Corymbia deserticola* subsp. *deserticola* and *Corymbia hamersleyana* low open woodland over *Hakea chordophylla* scattered tall shrubs over scattered low shrubs;
- YFC01:** *Eucalyptus gamophylla* low open woodland over *Hakea chordophylla* and *Grevillea wickhamii* subsp. *hispidula* high open shrubland over *Triodia* sp. Shovelanna Hill hummock grassland;
- YFC03:** *Corymbia deserticola* subsp. *deserticola* low open woodland over *Hakea chordophylla* scattered shrubs over *Triodia* sp. Shovelanna Hill scattered grasses over scattered herbs;
- YFD01:** *Corymbia deserticola* subsp. *deserticola* low open woodland over scattered low shrubs over *Aristida holathera* var. *holathera* and *Paraneurachne muelleri* very open tussock grassland;
- YFD02:** *Eucalyptus leucophloia* subsp. *leucophloia* scattered low trees over *Hakea chordophylla* scattered tall shrubs over *Acacia pruinocarpa* scattered shrubs over scattered low shrubs over *Aristida holathera* var. *holathera* very open tussock grassland over *Triodia* sp. Shovelanna Hill scattered hummock grassland;
- YFD03:** *Corymbia deserticola* subsp. *deserticola* scattered low trees over scattered low shrubs over *Aristida holathera* var. *holathera* scattered tussock grasses.

Ecologia (2008) also described two vegetation types within the application area:

- a) Isolated to open *Acacia inaequilatera* over open to moderately dense *Triodia wiseana*. and
- b) *Eucalyptus camaldulensis* /*E. victrix* +/- *Melaleuca leucadendra* over open to moderately dense tall shrubland over moderately dense soft grasses.

The latest flora and vegetation by Onshore Environmental (2016) described three broad floristic communities with five vegetation associations within the amended application area:

ME TPTIoExAciChPIApypGoro – Acacia High Shrubland - High Shrubland of *Acacia tumida* var. *pilbarensis*, *Acacia elachantha* and *Acacia monticola* over Open Hummock Grassland of *Triodia wiseana* and *Triodia pungens* with Low Open Woodland of *Eucalyptus xerothermica* and *Eucalyptus leucophloia* subsp. *leucophloia* in minor drainage lines and floodplains.

MI AtpPIAmTpTs Ch EII – Acacia High Shrubland - High Shrubland of *Acacia tumida* var. *pilbarensis*, *Petalostylis labicheoides* and *Grevillea wickhamii* over Open Tussock Grassland of *Cymbopogon ambiguus*, *Eriachne tenuiculmis* and *Themeda triandra* with Low Open Woodland of *Corymbia hamersleyana* in minor drainage lines and gorges.

HC TwTbrTpEIIChAmaGrwhAb – Triodia Hummock Grassland - Hummock Grassland of *Triodia brizoides*, *Triodia wiseana* and *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) with High Open Shrubland of *Acacia inaequilatera* and *Grevillea wickhamii* and Low Open Shrubland of *Ptilotus fusiformis*, *Ptilotus calostachyus* and *Heliotropium tenuifolium* on screeslopes and hillslopes.

FS Ts CdHcAancAiGrwh - Triodia Hummock Grassland - Hummock Grassland of *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) with Low Open Woodland of *Corymbia deserticola* subsp. *deserticola*, *Eucalyptus leucophloia* subsp. *leucophloia* and *Corymbia hamersleyana* and Low Open Shrubland of *Acacia hilliana* and *Acacia adoxa* var. *adoxo* on low hillslopes and crests.

HS TsTwTpEIICh AhiAaa - Triodia Hummock Grassland - Hummock Grassland of *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) and *Triodia wiseana* with Low Open Woodland of *Eucalyptus leucophloia* subsp.

leucophloia and *Corymbia hamersleyana* and Low Open Shrubland of *Acacia hilliana*, *Acacia adoxa* var. *adoxo* and *Corchorus lasiocarpus* subsp. *lasiocarpus* on hillslopes and crests.

Clearing Description	Houghy's Way Project. BHP Billiton Iron Ore Pty Ltd proposes to clear up to 141 hectares of native vegetation within a boundary of approximately 234 hectares, for the purpose of constructing and maintaining access tracks, maintenance and upgrade of airport infrastructure, accommodation, and associated works. The project is located approximately 95 kilometres north-west of Newman, within the Shire of East Pilbara.
Vegetation Condition	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994). To: Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994).
Comment	Vegetation condition has been determined by Onshore Environmental (2016) and BHP (2013), based on flora and vegetation assessments conducted by Ecologia (2008) and ENV (2009). Vegetation within drainage lines and floodplains has been subjected to grazing, but is in Very Good condition. There are small areas within the application area that are considered to be completely degraded, where pre-existing infrastructure occurs or land has been previously cleared. Clearing will be by mechanical means. Clearing permit CPS 5889/1 was granted by the Department of Mines and Petroleum (now the Department of Mines, Industry Regulation and Safety) on 19 December 2013 and was valid from 11 January 2014 to 11 January 2024. The permit authorised the clearing of up to 120 hectares of native vegetation within a boundary of approximately 213 hectares, for the purpose of maintenance and upgrade of airport infrastructure, accommodation, and associated works. On 30 November 2017, the Permit Holder applied to amend CPS 5889/1 to increase the amount of clearing authorised to 141 hectares, increase the clearing permit boundary to 234 hectares, amend the authorised purpose of the permit to include access roads, and extend the duration of the permit.

3. Assessment of application against Clearing Principles

Comments

BHP Billiton Iron Ore Pty Ltd (BHP) has applied to amend clearing permit CPS 5889/1 to increase the amount of clearing by 21 hectares to 141 hectares, and increase the clearing permit boundary by approximately 21 hectares to 234 hectares. The additional clearing is to upgrade an existing section of unsealed tracks from the Marillana deposit to the Barimunya Airport.

The vegetation within the additional amendment area is mapped as belonging to Beard associations 18 and 82 (GIS Database). These are the same as within the previous permit boundary and approximately 99% of the pre-European extent of each of these vegetation associations remains uncleared at both the state and bioregional level (Government of Western Australia, 2016).

A flora and vegetation survey of the proposed Marillana Infrastructure Corridor was undertaken by botanists from Onshore Environmental on 12-16 November 2015. This included the additional amendment area, most of the original permit boundary and some surrounding areas. Two *Triodia* Hummock Grassland vegetation associations were identified within the amendment area and these were also mapped within the previous permit boundary (Onshore Environmental, 2016; BHP, 2017). The vegetation associations have not been identified as a Threatened or Priority Ecological Community (BHP, 2017; GIS Database).

There are no Threatened flora species recorded within the additional amendment area (BHP, 2017; GIS Database). One Priority 2 flora species, *Isotropis parviflora*, was recorded in two locations within the application area during the flora and vegetation surveys. One location was previously excluded from the CPS 5889/1 application area using 10 metre buffers, however, it is within the additional amendment boundary. The other location is within the previously granted boundary and while it was not recorded during previous surveys, it was recorded during the recent Onshore Environmental (2016) survey. At each location it was recorded as scattered individuals (Onshore Environmental, 2016). BHP (2017) has committed to avoiding these two locations of *Isotropis parviflora* using a 10 metre buffer, where practicable. This will minimise the impact on Priority Flora.

A recent fauna survey by Biologic (2016) described one broad fauna habitat within the additional amendment boundary 'hillcrest/hillslope'. This is synonymous with the Biologic (2011) broad fauna habitats 'rocky hillslope' described in the decision report for CPS 5889/1 and mapped for most of the previous permit boundary. These fauna habitats tend to be more open and structurally simple and are dominated by varying species of spinifex. A common feature of this habitat type is a rocky substrate, often with exposed bedrock, and skeletal red soils (BHP, 2017). One conservation significant fauna species was recorded in the additional amendment area. The Western Pebble-mound Mouse (*Pseudomys chapmani*), listed a Priority 4, was recorded in one location within the additional amendment area and one directly adjacent to it (BHP, 2017). BHP will avoid active Western Pebble-mound Mouse mounds, where practicable (BHP, 2017). The application area may also provide habitat

to other conservation significant fauna species, however, given the large amount of suitable habitat in similar condition adjacent to the application area it is not likely to represent significant habitat for native fauna species (BHP, 2017; GIS Database).

According to GIS Databases, one minor non-perennial watercourse intersects the additional amendment area (GIS Database). However, the vegetation associations mapped in the area are not associated with watercourses (Onshore Environmental, 2016). Potential impacts to watercourses may be minimised by the watercourse management condition on the current permit.

The additional area is mapped as the Newman and Platform Land Systems (GIS Database), which are generally not susceptible to erosion (Van Vreeswyk et al., 2004). The moderate increase in the amount of clearing (21 hectares) is not likely to cause appreciable land degradation.

The amendment area is within the Pilbara Groundwater and Pilbara Surface Water Area proclaimed under the *Rights in Water and Irrigation Act 1914* (GIS Database). The moderate increase in the amount of clearing (21 hectares) is not likely to cause deterioration in the quality of surface or underground water.

The application area 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), not likely to be at variance to Principles (a), (b), (c), (d), (g), (h), (i) and (j) and is not at variance to Principle (e).

Methodology BHP (2017)
Biologic (2011)
Biologic (2016)
Government of Western Australia (2016)
Onshore Environmental (2016)
Van Vreeswyk et al. (2004)
GIS Database:
- DPaW Tenure
- Hydrography, Linear
- Landsystem Rangelands
- Pre-European Vegetation
- RIWI Act, Groundwater Areas
- RIWI Act, Surface Water Areas and Irrigation Districts
- Seamless Mosaic Imagery
- Threatened and Priority Flora
- Threatened and Priority Ecological Communities boundaries
- Threatened Fauna

Planning Instrument, Native Title, previous EPA decision or other matter.

Comments

There is one native title claim over the area under application (DPLH, 2017). This claim (WC2011/006) has been registered with the National Native Title Tribunal on behalf of the claimant group. 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 is one registered Aboriginal Sites of Significance (Site 9960) within the application area (DPLH, 2017). 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 Water and Environmental Regulation and the Department of Biodiversity Conservation and Attractions, 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 amendment application was advertised on 18 December 2017 by the Department of Mines, Industry Regulation and Safety (DMIRS), inviting submissions from the public. No submissions were received in relation to this application.

Methodology DPLH (2017)

4. References

BHP (2013) Barimunya Airport: Native Vegetation Clearing Permit Application Supporting Document for Maintenance and Upgrades for Airport, Accommodation Camp and Associated Infrastructure. BHP Billiton Iron Ore, Western Australia.

- BHP (2017) Houghy's Way NVCP Supporting Document to Amend Native Vegetation Clearing Permit CPS 5889/1. BHP Billiton Iron Ore Pty Ltd, November 2017.
- Biologic (2011) Barimunya Camp Vertebrate Fauna Survey. Report prepared for BHP Billiton Iron Ore Pty Ltd by Biologic, November 2011.
- Biologic (2016) Marillana Infrastructure Corridor – Level 1 Vertebrate Fauna Survey. Report prepared for BHP Billiton Iron Ore Pty Ltd by Biologic, July 2016.
- DPLH (2017) Aboriginal Heritage Enquiry System. Department of Planning, Lands and Heritage. <http://maps.daa.wa.gov.au/AHIS/> (Accessed 2 January 2017).
- Ecologia (2008) Marillana Creek (Yandi) Mining Operations – Two Phase Assessment of the Flora and Vegetation of the Proposed Marillana Creek (Yandi) Mine Extension Area RGP5 – KBR. Report prepared for BHP Billiton Iron Ore Pty Ltd by Ecologia, June 2008.
- ENV (2009) Rapid Growth Project 5: Yandi Flora Survey and Assessment of Barimunya Airport and a Potential Borrow Area. Report prepared for FAST JV by ENV Australia Pty Ltd, April 2009.
- Government of Western Australia (2016) 2016 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2016. WA Department of Parks and Wildlife, Perth.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Onshore Environmental (2016) Marillana Infrastructure Corridor Level 2 Flora and Vegetation Survey. Report prepared for BHP Billiton Iron Ore Pty Ltd by Onshore Environmental, July 2016.
- Van Vreeswyk, A.M.E., Payne, A.L., Leighton, K.A., and Hennig, P. (2004) An Inventory and Condition Survey of the Pilbara Region, Western Australia. Technical Bulletin No. 92. Department of Agriculture, Western Australia.

5. Glossary

Acronyms:

BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia (now DPLH)
DAFWA	Department of Agriculture and Food, Western Australia (now DPIRD)
DBCA	Department of Biodiversity Conservation and Attractions, Western Australia
DEC	Department of Environment and Conservation, Western Australia (now DBCA and DWER)
DEE	Department of the Environment and Energy, Australian Government
DER	Department of Environment Regulation, Western Australia (now DWER)
DMIRS	Department of Mines, Industry Regulation and Safety, Western Australia
DMP	Department of Mines and Petroleum, Western Australia (now DMIRS)
DPIRD	Department of Primary Industries and Regional Development, Western Australia
DPLH	Department of Planning, Lands and Heritage, Western Australia
DRF	Declared Rare Flora
DoE	Department of the Environment, Australian Government (now DEE)
DoW	Department of Water, Western Australia (now DWER)
DPaW	Department of Parks and Wildlife, Western Australia (now DBCA)
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities (now DEE)
DWER	Department of Water and Environmental Regulation, Western Australia
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
TEC	Threatened Ecological Community

Definitions:

{DPaW (2017) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

T

Threatened species:

Published as Specially Protected under the *Wildlife Conservation Act 1950*, listed under Schedules 1 to 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).

Threatened fauna is that subset of 'Specially Protected Fauna' declared to be 'likely to become

extinct' pursuant to section 14(4) of the *Wildlife Conservation Act 1950*.

Threatened flora is flora that has been declared to be 'likely to become extinct or is rare, or otherwise in need of special protection', pursuant to section 23F(2) of the *Wildlife Conservation Act 1950*.

The assessment of the conservation status of these species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria as detailed below.

- CR Critically endangered species**
Threatened species considered to be facing an extremely high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.
- EN Endangered species**
Threatened species considered to be facing a very high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.
- VU Vulnerable species**
Threatened species considered to be facing a high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.
- EX Presumed extinct species**
Species which have been adequately searched for and there is no reasonable doubt that the last individual has died. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora.
- IA Migratory birds protected under an international agreement**
Birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and the Bonn Convention, relating to the protection of migratory birds. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- CD Conservation dependent fauna**
Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- OS Other specially protected fauna**
Fauna otherwise in need of special protection to ensure their conservation. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice.
- P Priority species**
Species which are poorly known; or
Species that are adequately known, are rare but not threatened, and require regular monitoring. Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.
- P1 Priority One - Poorly-known species:**
Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.
- P2 Priority Two - Poorly-known species:**
Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.

P3 Priority Three - Poorly-known species:

Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations 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 locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.

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 are close to qualifying for Vulnerable, but are not listed as Conservation Dependent.

(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

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.