Government of **Western Australia**
Department of **Mines, Industry Regulation and Safety**

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 7647/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: BHP Billiton Pty Ltd

1.3. Property details

Property: Miscellaneous Licence 46/124
Local Government Area: Shire of East Pilbara
Colloquial name: Jimblebar Creek Access Track Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
23		Mechanical Removal	Construction and maintenance of an access track, hydrological investigations and associated infrastructure.

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 10 August 2017

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. The clearing permit application area has been broadly mapped as the following four Beard vegetation associations (GIS Database):

82: Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana*,
111: Hummock grasslands, shrub steppe; *Eucalyptus gamophylla* over hard spinifex,
166: Low woodland; mulga & *Acacia victoriae*; and
216: Low woodland; mulga (with spinifex) on rises.

A flora and vegetation survey was undertaken over the application area by Onshore Environmental (Onshore) (2015) during the period 8 to 12 September 2014. A total of 19 vegetation communities were identified within the application area.

Eucalyptus Woodland:
1 Woodland (to Open Woodland) of *Eucalyptus camaldulensis* subsp. *refulgens* and *Eucalyptus victrix* over High Open Shrubland of *Melaleuca glomerata*, *Acacia citrinoviridis* and *Acacia pyrifolia* var. *pyrifolia* along major drainage lines;

Acacia Low Open Forest:
2a - Low Open Forest of *Acacia aneura* over High Open Shrubland of *Eremophila fraseri* over Very Open Hummock Grassland of *Triodia basedowii* on bare plains;
2b - Low Open Forest of *Acacia aptaneura* and *Acacia paraneura* over Open Shrubland of *Acacia wanyu, Eremophila fraseri* and *Senna glutinosa* subsp. *luerssenii* over Very Open Hummock Grassland of *Triodia pungens* and *Triodia sp.* Shovelanna Hill (S. Van Leeuwen 3835) on floodplains;
2c - Low Open Forest of *Acacia citrinoviridis, Acacia coriacea* subsp. *pendens* and *Melaleuca glomerata* with Scattered Trees of *Eucalyptus camaldulensis* subsp. *refulgens* and *Eucalyptus victrix* on major drainage lines;

Acacia Low Open Woodland:
3a - Low Open Woodland of *Acacia aptaneura, Acacia pruinocarpa* and *Acacia paraneura* over Open Shrubland of *Eremophila fraseri, Acacia tetragonophylla* and *Acacia wanyu* over Low Open Shrubland of *Ptilotus obovatus* and *Solanum lasiophyllum* on raised stony plains;
3b - Low Open Woodland of *Eucalyptus victrix* and *Acacia citrinoviridis* over High Open Shubland of *Acacia monticola* and *Acacia pyrifolia* var. *pyrifolia* in medium drainage lines;

Acacia High Shrubland:
4 - High Shrubland of *Acacia citrinoviridis, Acacia pyrifolia* var. *pyrifolia* and *Gossypium robinsonii* over Low Shrubland of *Corchorus crozophorifolius* and *Tephroisa rosea* var. *Fortescue Creeks* (M.I.H. Brooker 2186) over Open Tussock Grassland of **Cenchrus ciliaris, Cymbopogon procerus* and *Eriachne pulchella* subsp. *dominii* on flood banks within major drainage channels;

Triodia Hummock Grassland:
5a - Hummock Grassland of *Triodia basedowii* and *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) with High Open Shrubland of *Acacia bivenosa* on stony plains;

5b - Hummock Grassland of *Triodia pungens* with High Shrubland of *Acacia pyrifolia* var. *pyrifolia, Gossypium robinsonii* and *Acacia citrinoviridis* and Low Open Woodland of *Corymbia hamerselyana* on floodplains;
5c - Hummock Grassland of *Triodia basedowii* with High Open Shrubland of *Acacia pachyacra* and *Acacia ancistrocarpa* and Scattered Low Trees of *Corymbia hamersleyana* and *Hakea lorea* subsp. *lorea* on stony sandplains;
5d - Hummock Grassland of *Triodia angusta* and *Triodia pungens* with Shrubland of *Acacia bivenosa* and Low Open Mallee of *Eucalyptus socialis* subsp. *eucentrica* and *Eucalyptus gamophylla* on low calcrete hills and rises;
5e - Hummock Grassland of *Triodia pungens* and *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) with Low Open Woodland of *Acacia aptaneura*, *Acacia pruinocarpa* and *Corymbia hamersleyana* and High Open Shrubland of *Acacia ancistrocarpa*, *Acacia wanyu* and *Acacia synchronicia* on eroded plains and slopes;
5f - Hummock Grassland of *Triodia basedowii* with High Shrubland of *Acacia ancistrocarpa*, *Acacia wanyu* and *Acacia kempeana* and Scattered Low Trees of *Corymbia hamerselyana* on sandplains;
5g - Hummock Grassland of *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) with Open Shrubland of *Acacia ancistrocarpa*, *Acacia trudgeniana* and *Senna glutinosa* subsp. x *luerssenii* and Scattered Low Trees of *Acacia pruinocarpa* and *Corymbia hamerselyana* on footslopes and hillslopes;
5h - Hummock Grassland of *Triodia pungens* with Open Shrubland of *Acacia ancistrocarpa* and Scattered Low Trees of *Corymbia hamersleyana* on undulating plains and floodplains;

Triodia Open Hummock Grassland:
6 - Open Hummock Grassland of *Triodia pungens* (and Open Tussock Grassland of **Cenchrus ciliaris*) with Low Open Woodland of *Corymbia hamersleyana* and *Acacia citrinoviridis* and High Open Shrubland of *Acacia sclerosperma* subsp. *sclerosperma*, *Acacia pyrifolia* var. *pyrifolia* and *ancistrocarpa* on levee banks of major drainage lines;

***Cenchrus* Tussock Grassland:**
7a - Tussock Grassland of **Cenchrus ciliaris* with Low Open Woodland of *Corymbia hamersleyana* and High Open Shrubland of *Acacia dictyophleba* and *Acacia sclerosperma* subsp. *sclerosperma* on raised levee banks of major drainage lines;
7b - Tussock Grassland of **Cenchrus ciliaris* and *Cymbopogon procerus* with Woodland of *Eucalyptus camaldulensis* subsp. refulgens and *Eucalyptus victrix* and Low Open Woodland of *Acacia citrinoviridis* and *Acacia coriacea* subsp. *pendens* on levee banks of major drainage lines;
7c - Tussock Grassland of **Cenchrus ciliaris* with Low Woodland of *Acacia citrinoviridis* and Very Open Hummock Grassland of *Triodia pungens* on levee banks of major drainage lines.

Clearing Description
Jmblebar Creek Access Track Project
BHP Billiton Iron Ore Pty Ltd (BHPBIO) proposes to clear up to 23 hectares within an application area of approximately 807.16 hectares for the purposes of constructing and maintain an access track, hydrological investigations and associated infrastructure. The project is located approximately 40 kilometres east of Newman within the Shire of East Pilbara.

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

to:

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

Comment
The proposed clearing is required for the construction of an access track along Jimblebar Creek to enable access to monitoring locations associated with discharge from the Orebody 31 Mining Operations.

3. Assessment of application against Clearing Principles

Comments

The application area occurs within the Pilbara Interim Biogeographical Regionalisation for Australia (IBRA) bioregion (CALM, 2002; GIS Database). The Pilbara IBRA region comprises a diverse range of landform features and has not been extensively cleared as approximately 99% of the pre-European vegetation remains (Government of Western Australia, 2016; GIS Database). The three Beard vegetation associations are also well represented and approximately 98% of the pre-European vegetation extent remains in the Pilbara region (Onshore , 2016; GIS Database). The application area is neither a remnant nor does it form part of any remnants within the local area (GIS Database).

According to available databases, there are no Threatened Ecological Communities (TEC's) or Priority Ecological Communities (PEC's) occurring within the application area (GIS Database). The flora survey undertaken by Onshore (2015) in 2014 did not record any vegetation associations that are representative of listed TEC's or PEC's (Onshore, 2015).

A comprehensive Level 2 flora survey was undertaken over a broad 20 kilometre survey area of the Jimblebar Creek and it's riparian zone (Onshore, 2015). The survey recorded 167 flora taxa from 97 genera representing 39 families (Onshore, 2015). No records of Threatened or Priority flora have been recorded within the application area as part of the flora survey (Onshore, 2015; GIS Database). Three of the plant taxa recorded during the flora survey were determined to represent range extensions based on the current known distribution of the total flora. These include; *Chamaecrista symonii*, *Eragrostis speciosa* and *Halgania erecta* (Onshore, 2015). C. symonii and E. speciosa are widely distributed in the northern areas of Western Australia (WA) including the Great Sandy Desert, Little Sandy Desert, Northern Kimberley, Ord Victoria Plain, Pilbara and Tanami IBRA regions (WA Herbarium, 1998-). *H. erecta* is also broadly distributed across the northern, eastern and southern areas of WA including the Augustus, Carnegie, Central, Eastern Goldfield, Eastern Murchison, Fortescue, Lateritic Plain, Mackay, Mann-Musgrave Block, Shield, Southern Cross and Trainor IBRA regions (WA Herbarium, 1998-).

Three introduced (weed) species have been recorded in the application area. These include; *Cenchrus ciliaris, Cenchrus setiger* and *Bidens bipinnata* (Onshore, 2015). Weed invasion has the potential to alter the

biodiversity of an area. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

A Level 1 fauna survey was conducted over the application area (Onshore, 2015b). Based on the results of this survey the following six broad habitat types have been identified in the application area (BHPBIO, 2017; Onshore, 2015b):

1. Flood Plain;
2. Medium Drainage Lines;
3. Major Drainage Lines;
4. Sand Plain;
5. Stony Plain; and
6. Crest/slope.

The most widespread fauna habitat type of the application area was major drainage line habitat and the least widespread fauna habitat was crest/slope (BHPBIO, 2017). One Threatened fauna species was recorded in the application area as part of the fauna survey (BHPBIO, 2017; Onshore, 2015b).

Based on the results of the fauna survey and database searches, it was determined that five fauna species of conservation significance have the potential to occur in the application area (BHPBIO, 2017; Onshore, 2015b):

- Fork-tailed Swift (*Apus pacificus* – Migratory, WC Act Schedule 3);
- Rainbow Bee-eater (*Merops ornatus* – Marine, WC Act Schedule 3);
- Pilbara Flat-headed Blind Snake (*Anilios ganei* – Priority 1);
- Brush-tailed Mulgara (*Dasycercus blythi* - Priority 4); and
- Western Pebble-mound Mouse (*Pseudomys chapmani* – Priority 4).

The fauna survey undertaken by Onshore (2015b) recorded the Rainbow Bee-eater within the application area (Onshore, 2015b). Onshore (2015b) reported suitable foraging habitat (stony plain habitat) for the species in the application area (Onshore, 2015b). The potential impact on the Rainbow Bee-eater species was considered to be low as no evidence of breeding was recorded in the application area and large areas of suitable breeding and foraging habitat are widespread in surrounding areas (BHPBIO, 2017; Onshore, 2015b). No permanent areas of standing water are located in the application area (DotEE, 2017). Rainbow Bee-Eaters are also highly mobile, common in the Pilbara region and widely distributed around Australia. It is unlikely Rainbow Bee-eater individuals would solely rely on the application area, therefore the application area is not considered to be significant habitat for the species (Onshore, 2015b; DotEE, 2017).

Given the application area is small (23 hectares) and contains minimal vegetation, the area is not expected to contain a high level of faunal diversity or support significant habitat for native fauna. The application area is not likely to contain higher fauna diversity than surrounding areas. The vegetation types and landforms are also well represented in surrounding areas. For these reasons, it is unlikely the proposal will result in the clearing of native vegetation that comprises a high level of biodiversity.

Jimblebar Creek, an ephemeral watercourse, is located within the application area (Onshore, 2015; GIS Database). The proposed access track will be located on the western side of Jimblebar Creek (BHPBIO, 2017). BHP Billiton (2017) have committed to minmise clearing where possible and will utilise existing tracks and crossings. If it is necessary for new crossings to be installed, clearing will be kept to a bare minimum and will be constructed flat and level to the surface (i.e. simple clearing with no bunds) to maintain the natural surface water flow (BHP Billiton, 2017). Potential impacts to Jimblebar Creek as a result of the proposed clearing may be minimised by the implementation of a watercourse management condition. Riparian vegetation occurs in the application area and some of this vegetation w is proposed to be cleared to construct the access track (BHPBIO, 2017). The clearing is considered to be at variance to Principle (f), although the clearing is not likely to significantly impact the ecological functions of watercourses in the surrounding area. Native vegetation clearing will not have a detrimental impact on vegetation types located in the area.

The majority of the application area is mapped as the River land system, while small portions of the application area are located in the Boolgeeda, Divide and Fortescue land systems (BHPBIO, 2017; Van Vreeswyk et al., 2004; GIS Database). The River land system consists of active flood plains and major rivers supporting grassy Eucalypt woodlands, tussock grasslands and soft spinifex grasslands (Van Vreeswyk et al., 2004). The River system is mostly stabilised by buffel grass and spinifex and erosion is uncommon. However, when vegetation is removed the susceptibility to erosion is high-very high (Van Vreeswyk et al., 2004). The Fortescue land system consists of allubial plans and flood plains which supports patchy, grassy woodlands, shrubland and tussock grasslands (Van Vreeswyk et al., 2004). The land system is subject to erosion if vegetation cover is removed (Van Vreeswyk et al., 2004). The Boolgeeda and Divide land systems are resilient and not prone to degradation or erosion (Van Vreeswyk et al., 2004). The relatively small amount of native vegetation clearing required for the proposal is not likely to cause soil or wind erosion. Potential land degradation impacts may be minimised by the implementation of a staged clearing condition.

No Public Drinking Water Source Areas are located within or in the vicinity of the application area (GIS Database). It is unlikely that the small amount of clearing required for the proposal will cause deterioration in the quality of surface or ground water, including sedimentation, erosion, turbidity or eutrophication of water bodies on-site or off-site (GIS Database).

The application area receives low mean annual rainfall (322.1 millimetres) and very high average annual evaporation rate (approximately 3,200 millimetres) (BoM, 2017). Whilst large, annual rainfall events may result

in the flooding of the area, the proposed clearing of 23 hectares is not likely to lead to an increase in incidence or intensity of flooding. Given the clearing proposed of 23 hectares in an area which remains largely uncleared it is unlikely that land degradation, erosion, water quality or flooding impacts should occur.

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

Methodology

BHPBIO (2017)
BoM (2017)
CALM (2002)
DotEE (2017)
DPaW (2016)
Government of Western Australia (2016)
Keighery (1994)
Onshore (2015a)
Onshore (2015b)

GIS Database:
- DPaW Tenure
- Hydrography, linear
- IBRA WA (Regions - Sub Regions)
- Pre-European Vegetation
- Public Drinking Water Source Areas
- Rangeland Land System Mapping
- TEC/PEC – Boundaries
- TEC/PEC – Buffer
- Threatened Fauna
- Threatened and Priority Flora

Planning instrument, Native Title, RIWI Act Licence, EP Act Licence, Works Approval, Previous EPA decision or other matter.

Comments

There is one native title claim (WC2005/006) over the application area (DPLH, 2017). This claim has been registered by the National Native Title Tribunal on behalf of the claimant groups (DPLH, 2017). However, the 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 (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 clearing permit application was advertised on 10 July 2017 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. There were no submissions received.

Methodology

DPLH (2017)

4. References

BHPBIO (2017) Native Vegetation Clearing Permit Application Supporting Document for the Installation for the Installation of a a Monitoring Track. BHP Billiton Pty Ltd, Perth, Western Australia, June 2017.

BoM (2017) Bureau of Meteorology Website - Climate Data Online, Newman Aero. Australian Government, Bureau of Meteorology. http://www.bom.gov.au/climate/data/index.shtml (Accessed 7 August 2017).

CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Pilbara 3 (PIL3 – Hamersley subregion) Department of Conservation and Land Management, Perth, Western Australia.

DotEE (2017) *Merops ornatus* in Species Profile and Threats Database. Department of the Environment and Energy. http://www.environment.gov.au/sprat. Department of the Environment and Energy, Canberra. (Accessed 7 August 2017).

DPLH (2017) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. http://maps.daa.wa.gov.au/AHIS/ (Accessed 2 August 2017).

Government of Western Australia (2016) 2016 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Western Australian Department of Parks and Wildlife, Perth, Western Australia.

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

Onshore (2015a) Jimblebar Creek Riparian Flora and Vegetation Baseline Survey. Report Prepared for BHP Billition Iron Ore Pty Ltd, by Onshore Environmental, January 2015.

Onshore (2015b) Level 1 Flora and Vegetation Survey and Vertebrate Fauna Assessment, OB31 Jimblebar Access Track. Report Prepared for BHP Billition Iron Ore Pty Ltd, by Onshore Environmental, October 2015.

Van Vreeswyk, A.M.E., Payne, A.L., Leighton, K.A. and Hennig, P. (2004) Technical Bulletin - An Inventory and Condition Survey of the Pilbara Region, Western Australia, No. 92. Department of Agriculture, Government of Western Australia, Perth, Western Australia.

WA Herbarium (1998-) FloraBase - The Western Australian Flora. Flora Species Search, Department of Parks and Wildlife, Western Australian Herbarium. http://florabase.dpaw.wa.gov.au/ (Accessed 8 August 2017).

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)
DotEE	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 DotEE)
DoW	Department of Water, Western Australia (now DWER)
DPaW	Department of Parks and Wildlife, Western Australia (now DBCA)
DWER	Department of Water and Environmental Regulation, Western Australia
EPA	Environmental Protection Authority, Western Australia
EP Act	*Environmental Protection Act 1986*, Western Australia
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (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	*Rights in Water and Irrigation Act 1914*, 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.

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.

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.