



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 4391/3  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Hamersley Iron Exploration Pty Ltd

### 1.3. Property details

Property: Exploration Licence 47/584  
Exploration Licence 47/1943  
Local Government Area: Shire of Ashburton  
Colloquial name: Juna Downs Exploration Project

### 1.4. Application

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

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 13 October 2016

## 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. Two Beard vegetation associations have been mapped within the application area:

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

A Rio Tinto botanist conducted a flora and vegetation survey over the application area and its surrounds in May 2009, July 2009 and October 2010 (Rio Tinto, 2011). Eleven vegetation types were recorded within the application area (Rio Tinto, 2011):

#### Vegetation from Stony Hill Slopes

##### Vegetation Type 1 EgAsEiCHTbPmTtCd

*Eucalyptus gamophylla* low open forest over *Acacia steedmanii* open scrub over *Eremophila longifolia* open shrubland over *Corchorus* sp. Hamersley Range low open shrubland over *Triodia basedowii* open hummock grassland over *Paraneurachne muelleri*, *Themeda triandra* open tussock grassland over *Cyperus dichotoma* very open sedges.

##### Vegetation Type 2 EIScSeSsPrTpTbAcAl

*Eucalyptus leucophloia* low open forest over *Sida cardiophylla*, *S. echinocarpa*, *Solanum sturtianum*, *Ptilotus rotundifolius* low open heath over *Triodia pungens*, *T. basedowii* hummock grassland over *Amphipogon caricinus*, *Aristida latifolia* very open tussock grassland over various *Ptilotus* very open herbs.

##### Vegetation Type 3 EISpSfScTpTbPmTtEm

*Eucalyptus leucophloia* low open forest over *Senna pruinosa*, *S. ferraria* open shrubland over *Sida cardiophylla* low shrubland over *Triodia pungens*, *T. basedowii* hummock grassland over *Paraneurachne muelleri*, *Themeda triandra*, *Eriachne mucronata* tussock grassland.

#### Vegetation from Slight Slopes

##### Vegetation Type 4 EIEgAiAsApAbPrSoTwTp

*Eucalyptus leucophloia*, *E. gamophylla* low woodland over *Acacia inaequilatera*, *A. steedmanii* high open shrubland over *Acacia pachyacra*, *A. bivenosa* open shrubland over *Ptilotus rotundifolius*, *Senna oligophylla* low open shrubland over *Triodia wiseana*, *T. pungens* hummock grassland.

##### Vegetation Type 5 CdEgPrTwTpAc

*Corymbia deserticola*, *Eucalyptus gamophylla* low open forest over *Ptilotus rotundifolius* low open shrubland over *Triodia wiseana*, *T. pungens* hummock grassland over *Amphipogon caricinus* very open tussock grassland.

#### Vegetation from Rocky Outcrops

##### Vegetation Type 6 EISgPrTpTMeTt

*Eucalyptus leucophloia* low open woodland over *Senna glutinosa* open shrubland over *Ptilotus rotundifolius* low

open shrubland over *Triodia pungens*, *Triodia* sp. Mt Ella hummock grassland over *Themeda triandra* open tussock grassland.

#### Vegetation from Flats and Plains

##### Vegetation Type 7 ChCdEgAtPrSsTbAcAlAhPm

*Corymbia hamersleyana*, *C. deserticola*, *Eucalyptus gamophylla* low open forest over *Acacia trudgeana* open shrubland over *Ptilotus rotundifolius*, *Solanum sturtianum* low open shrubland over *Triodia basedowii* open hummock grassland over *Amphipogon carcinus*, *Aristida latifolia*, *A. holathera*, *Paraneurachne muelleri* tussock grassland.

##### Vegetation Type 8 ChGrSsPrPmTtSf

*Corymbia hamersleyana* low open woodland over *Gossypium robinsonii*, *Stylobasium spathulatum* shrubland over *Ptilotus rotundifolius* low shrubland over *Paraneurachne muelleri*, *Themeda triandra* tussock grassland over *Schizachyrium fragile* open bunch grassland.

##### Vegetation Type 9 CdEgAsScTpPm

*Corymbia deserticola*, *Eucalyptus gamophylla* low woodland over *Acacia steedmanii* shrubland over *Sida cardiophylla* low open heath over *Triodia pungens* very open hummock grassland over *Paraneurachne muelleri* tussock grassland.

#### Vegetation from Minor Drainage Lines

##### Vegetation Type 10 EIAsSpSgCHRHsTpTMETt

*Eucalyptus leucophloia* low woodland over *Acacia steedmanii* high open shrubland over *Senna pruinosa*, *S. glutinosa* shrubland over *Corchorus* sp. Hamersley Range, *Hibiscus sturtii* low open heath over *Triodia pungens*, *T. sp.* Mt Ella hummock grassland over *Themeda triandra* tussock grassland.

##### Vegetation Type 11 EIGrAcTwTpTt

*Eucalyptus leucophloia* low open woodland over *Gossypium robinsonii*, *Acacia cowleana* shrubland over *Triodia wiseana*, *T. pungens* open hummock grassland over *Themeda triandra* open tussock grassland.

The proposed amended boundary was surveyed over three trips by Rio Tinto botanists between October 2014 and April 2015. An additional six vegetation types have been identified within the proposed amended permit boundary (Rio Tinto, 2016):

#### Vegetation of Hills and Lower Slopes

S1: Low open woodland to scattered low trees of *Eucalyptus leucophloia* subsp. *leucophloia*, *Corymbia hamersleyana* and *Corymbia deserticola* subsp. *deserticola* over tall open shrubland / mallee of *Acacia atkinsiana* and *Eucalyptus gamophylla* over open tussock grassland of *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) with *Amphipogon sericeus*.

S2: Scattered low trees of *Corymbia deserticola* subsp. *deserticola* over scattered shrubs of *Acacia atkinsiana*, *Acacia ancistrocarpa* and *Senna artemisioides* subsp. *helmsii* over open tussock grassland of *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) with *Amphipogon sericeus* and *Triodia epactia*.

S3: Tall mallee shrubland of *Eucalyptus gamophylla* over scattered mixed shrubs over open tussock grassland of *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) with *Triodia epactia*, *Paraneurachne muelleri* and *Themeda triandra*.

S4: Low open woodland to scattered low trees of *Eucalyptus leucophloia* subsp. *leucophloia* over open hummock grassland of *Triodia epactia* and *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835).

#### Vegetation of Drainage Lines

D2: Low woodland to low open woodland of *Eucalyptus leucophloia* subsp. *leucophloia* and *Corymbia hamersleyana* over tall shrubland to shrubland of *Acacia atkinsiana*, *Gossypium robinsonii*, *Acacia tenuissima*, *Acacia ancistrocarpa*, *Acacia bivenosa*, *Acacia maitlandii* and *Senna glutinosa* subsp. *glutinosa* over tussock grassland to open tussock grassland of *Themeda triandra* and *Triodia epactia* with *Eriachne mucronata*.

D4: Low open woodland of *Eucalyptus leucophloia* subsp. *leucophloia* and *Corymbia ferritcola* over tall open shrubland of *Acacia pyrifolia*, *Acacia tenuissima* and mixed shrubs over open tussock grassland of *Triodia* sp. Mt Ella (M.E. Trudgen 12739), *Themeda triandra*, *Triodia epactia* and *Cymbopogon ambiguus*.

#### Clearing Description

Juna Downs Exploration Project  
Hamersley Iron Exploration Pty Ltd proposes to clear up to 26.5 hectares within a total boundary of approximately 712 hectares for the purpose of mineral exploration (GIS Database).

The project is located approximately 80 kilometres south-east of Tom Price, in the Shire of Ashburton (GIS Database).

#### Vegetation Condition

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

To

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

#### Comment

The vegetation condition was assessed by a botanist from Rio Tinto (2011). The vegetation conditions were described using a scale based on Trudgen (1988) and have been converted to the corresponding conditions

from the Keighery (1994) scale. The proposed clearing is for the purpose of mineral exploration. This includes the creation of 77 drill pads and sumps, and the establishment of access tracks (Rio Tinto, 2010). Clearing will be by mechanical means.

Clearing permit CPS 4391/1 was granted by the Department of Mines and Petroleum on 18 August 2011 and was valid from 10 September 2011 to 31 July 2016. The clearing permit authorised the clearing of 11.5 hectares of native vegetation within a permit boundary of 168 hectares.

Clearing permit CPS 4391/1 was amended on 5 May 2016, extending the duration of the permit to 31 December 2026, with no clearing to be undertaken after 31 December 2021. The proposed clearing area remained unchanged at 11.5 hectares.

Hammersley Iron Exploration Pty Ltd has applied to increase the size of the area approved to clear to 26.5 hectares, increase the permit boundary, and amend clearing permit Condition 10.

### 3. Assessment of application against clearing principles

#### Comments **Proposal is not likely to be at variance to this Principle**

On 5 August 2016, Hammersley Iron Exploration Pty Ltd applied to increase the area to be cleared from 11.5 hectares to 26.5 hectares, increase the permit boundary from approximately 168 to approximately 712 hectares, and amend the reporting dates in Condition 10 of the clearing permit.

Three flora and vegetation surveys of the proposed amended permit area have been undertaken by Rio Tinto (2016) botanists during October 2014, November 2014 and April 2015. Both surveys undertaken in 2014 would be regarded as sub-average seasonal timing, whilst the April 2015 survey would be regarded as good seasonal timing (Rio Tinto, 2016). Due to the multiple trips, including the good conditions experienced in April 2015, it is likely a representative flora species list for the study area has been recorded.

No species of Threatened flora have been recorded within the permit area and the habitat present is not likely to support Threatened flora species known in the Pilbara (Rio Tinto, 2016; Western Australian Herbarium, 2016). There have been eight species of priority flora recorded within or adjacent to the permit area: *Eremophila* sp. Hammersley Range (K. Walker KW 136) (Priority 1); *Tetradlea fordiana* (Priority 1); *Sida* sp. Barlee Range (S. van Leeuwen 1642) (Priority 3); *Rostellularia adscendens* var. *latifolia* (Priority 3); *Solanum kentrocaule* (Priority 3); *Triodia* sp. Mt Ella (M.E. Trudgen 12739) (Priority 3); *Acacia bromilowiana* (Priority 4) and *Eremophila magnifica* subsp. *magnifica* (Priority 4) (Rio Tinto, 2016).

*Eremophila* sp. Hammersley Range (K. Walker KW 136) is a shrub growing to 200 cm occurring on hill crests and cliff tops of ironstone hills (Rio Tinto, 2016). This species was recorded during the current survey from eight locations for a total population of 30 plants. However only two records (2 plants) were located within the application area, the remaining locations were recorded from outside of the study area (Rio Tinto, 2016). *Tetradlea fordiana* is a spreading sub-shrub to 40 cm, that grows out of crevices of exposed ironstone cliff faces (Rio Tinto, 2016). Twenty locations for a total count of 297 plants were recorded during the flora survey, however all plants were recorded outside of the application area and will not be impacted by the proposal (Rio Tinto, 2016).

*Sida* sp. Barlee Range (S. van Leeuwen 1642) has a range of approximately 372 kilometres on NatureMap within the Pilbara region (Department Parks and Wildlife, 2016) and 266 kilometres from the Rio Tinto database. This species has a total population count of 9,589 plants, from 1,427 records, within the Rio Tinto database (Rio Tinto, 2016). *Rostellularia adscendens* var. *latifolia* has a range of approximately 420 kilometres on NatureMap within the Pilbara region (Department of Parks and Wildlife, 2016) and 392 kilometres from the Rio Tinto database. This species has a total population count of 4,543 plants, from 205 records, within the Rio Tinto database (Rio Tinto, 2016). *Solanum kentrocaule* has a range of approximately 210 kilometres on NatureMap within the Pilbara region (Department of Parks and Wildlife, 2016) and 140 kilometres from the Rio Tinto database. This species has a total population count of 79 plants, from 17 records, within the Rio Tinto database. This relatively low count is to be expected, as this species has only been recently described (Rio Tinto, 2016). *Triodia* sp. Mt Ella (M.E. Trudgen 12739) has a range of approximately 382 kilometres on NatureMap, predominantly from the Hammersley Ranges, with one record south of Rudall River in the Little Sandy Desert IBRA region (Department of Parks and Wildlife, 2016) and 182 kilometres from the Rio Tinto database. This species has a total population count of 10,677 plants, from 431 records, within the Rio Tinto database (Rio Tinto, 2016). These species have been recorded from numerous locations across the Pilbara and the additional 15 hectares of clearing is not likely to have a significant impact on these species.

*Acacia bromilowiana* has a range of approximately 389 kilometres on NatureMap within the Pilbara region (Department of Parks and Wildlife, 2016) and 359 kilometres from the Rio Tinto database. This species has a total population count of 1,907 plants, from 132 records, within the Rio Tinto (2016) database. *Eremophila magnifica* subsp. *magnifica* has a range of approximately 289 kilometres on NatureMap within the Pilbara region (Department of Parks and Wildlife, 2016) and 333 kilometres from the Rio Tinto database. This species has a total population count of 13,152 plants, from 940 records, within the Rio Tinto database.

Potential impacts to priority flora may be minimised by the existing flora management condition.

Three broad habitat types have been described in the amended application area:

- S1: Rocky Slopes

- S2: Undulating Slopes
- D1: Drainage Line

None of the fauna habitats occurring within the application area correspond to any ecosystems listed as Threatened under the EPBC Act and none are consistent with ecosystems listed as Threatened Ecological Communities or Priority Ecological Communities by the Department of Parks and Wildlife (Rio Tinto, 2016).

The fauna habitats present are considered to be common and widespread throughout the region (Rio Tinto, 2016). Two Northern Quoll (*Dasyurus hallucatus* - Threatened) scats were recorded from two locations within fauna habitat unit 'S1 - Rocky slopes'. This unit comprised the mid and lower slopes of the range adjoining the southern sections of the application area, covering covering 102.02 hectares of the application area (Rio Tinto, 2016). Fauna habitat 'S1 - Rocky slopes' is not considered to be restricted at a local or regional level, however it does contain habitat, in the form of rocky overhangs and small caves, which may provide suitable denning habitat to support quolls. As suitable habitat for this species is widespread in the region, and nature of the proposed clearing being low impact, it is considered unlikely to have a significant impact on this species above that of the previous permit (CPS 4391/2).

There has been several Western Pebble-mound Mouse mounds (*Pseudomys chapmanii* - Priority 4) recorded within the permit area (Rio Tinto, 2016). Suitable habitat for this species is widespread throughout the region. The additional 15 hectares of clearing is not likely to have a significant impact on this species above that of the previous permit (CPS 4391/2).

There are no permanent watercourses or wetlands within the permit area, however, there are numerous ephemeral watercourses that dissect the area (GIS Database). These watercourses only flow following significant rainfall events. The clearing of an additional 15 hectares within the permit area for exploration is not likely to have a significant impact on the quality of surface or ground water within the local area.

The permit area is situated within the Boolgeeda and Newman land systems (Van Vreeswyk et al, 2004; GIS Database). These land systems are either resistant to erosion or have experienced little erosion to date (Vreeswyk et al., 2004). The proposed additional clearing is not likely to have a significant increase on the levels of land degradation in the permit area.

The permit boundary abuts the boundary of Karijini National Park (GIS Database). Care needs to be taken to ensure that clearing activities do not increase the spread of weeds into the National Park. Potential impacts from weed species may be minimised by the existing weed management condition.

The proposed amendment is unlikely to result in any significant change to the environmental impacts of the proposed clearing. The assessment against the clearing principles remains consistent with the assessment contained in decision report CPS 4391/2 and CPS 4391/1.

**Methodology** Department of Parks and Wildlife (2016)  
Rio Tinto (2016)  
Van Vreeswyk et al (2004)

GIS Database:  
- DPaW Tenure  
- Rangeland Land System Mapping  
- Threatened and Priority Flora  
- Threatened and Priority Ecological Communities Buffered

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

### Comments

There is one native title claim over the area under application (DAA, 2016). This claim (WC2011/006) has been registered with the National Native Title Tribunal on behalf of the claimant group (GIS Database). However, the mining tenements have 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 registered Aboriginal Sites of Significance within the proposed clearing area (DAA, 2016). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Sites of Aboriginal Significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of Environment Regulation, the Department of Water, and the Department of Parks and Wildlife, 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 22 August 2016 and 26 September 2016 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

**Methodology** DAA (2016)

GIS Database:  
- Aboriginal Sites of Significance

#### 4. References

- DAA (2016) Aboriginal Heritage Inquiry System, Government of Western Australia, Department of Aboriginal Affairs, Perth, <<http://maps.dia.wa.gov.au/AHIS2/>> (accessed 3 October 2016).
- Department of Parks and Wildlife (2016) NatureMap - Mapping Western Australia Biodiversity, Department of Parks and Wildlife <<http://naturemap.dpaw.wa.gov.au/default.aspx>> accessed 3 October 2016.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Rio Tinto (2011) Botanical Survey for an Exploration Drilling Program at Juna Downs South E47/1943 and Supporting Document to a Native Vegetation Clearing Permit Application. Report Prepared by Rio Tinto Iron Ore, January 2011.
- Rio Tinto (2016) Flora, Vegetation and Fauna Habitat Assessment at Juna Downs - Native Vegetation Clearing Permit Supporting Report. Report Prepared by Rio Tinto Iron Ore, May 2016.
- 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.

#### 5. Glossary

##### Acronyms:

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

## **Definitions:**

{DPaW (2015) 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.