



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 7547/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: **Kidman Resources Limited**

### 1.3. Property details

Property: Miscellaneous Licence 77/107  
Local Government Area: Shire of Yilgarn  
Colloquial name: Mt Holland Project

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
12		Mechanical Removal	Airstrip Refurbishment

### 1.5. Decision on application

Decision on Permit Application: Granted  
Decision Date: 29 June 2017

## 2. Site Information

### 2.1. Existing environment and information

#### 2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Beard vegetation associations have been mapped at a 1:250,000 scale for the whole of Western Australia. One Beard vegetation association has been mapped within the application area (GIS Database).  519: Shrublands: mallee scrub, <i>Eucalyptus eremophila</i> (GIS Database).	Mt Holland Project Kidman Resources Limited proposes to clear up to 12 hectares of native vegetation within a total boundary of approximately 12 hectares for the purpose of airstrip refurbishment. The project is located approximately 91 kilometres north-east of Hyden, in the Shire of Yilgarn.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery, 1994).	The vegetation condition was based upon observation from Kidman Resources Limited (2017).

A flora and vegetation survey of the application area and its surrounds was undertaken in July 2014, with a follow up survey undertaken in August. The vegetation within the application area is described as (Kidman Resources Limited, 2017):

Mallee woodland and Eucalypt woodland over *Allocasuarina* shrubland.

## 3. Assessment of application against clearing principles

### (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

#### Comments

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

The application area occurs within the Southern Cross (COO2) sub-region of the Coolgardie Bioregion of the Interim Biogeographic Regionalisation of Australia (IBRA) (GIS Database). This sub-region is characterised by subdued relief, comprising of gently undulating lands dissected by broad valleys with bands of low greenstone hills (CALM, 2002). The valleys of this sub-region have Quaternary duplex and gradational soils, with chains of saline playa-lakes supporting dwarf shrub lands of samphire. Around these lakes, diverse *Eucalyptus* woodlands, rich in endemic eucalypts occur on the low greenstone hills, valley alluvials and broad plains of calcareous earth (CALM, 2002). At mid-level, the granite basement outcrops and supports swards of *Borya constricta*, with stands of *Acacia acuminata* and *Eucalyptus loxophleba*, while the upper-levels are comprised of the eroded remnants of a lateritic duricrust giving way to yellow sand-plains, gravelly sand-plains and lateritic breakaways. Mallees and scrub-heaths occur on the uplands and sand lunettes associated with playas along the broad valley floors and sand sheets around the granite outcrops (CALM, 2002).

The majority of the application area has been previously disturbed being a former gold mining operation. Flora

and vegetation within the application area is extremely limited and disturbed, comprising some regrowth within the airstrip area and along the extreme perimeter of the tenement (Kidman Resources Limited, 2017).

A targeted flora survey of the application area identified two vegetation types within the application area (Blueprint Environmental Strategies, 2014). A total of 19 families, 34 genera and 71 species were identified within the application area and surrounding vegetation (Blueprint Environmental Strategies, 2014). No Priority flora species were identified within the application area or surroundings, with one Threatened flora species having been identified adjacent to the application area (Kidman Resources Limited, 2017; Native Vegetation Solutions, 2014).

No weed species were identified within the application area (Kidman Resources Limited, 2017; Native Vegetation Solutions, 2014). Weeds have the potential to significantly change the dynamics of a natural ecosystem and lower the biodiversity of an area. Potential impacts to the biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

A search of the Department of Parks and Wildlife (DPAW) Naturemap identified that 9 frog, 60 reptile, 113 bird and 31 mammal species have the potential to be within a 50 kilometre radius of the application area (DPAW, 2014). According to database records and published information, the application area may support eight species protected under the *Environment Protection and Biodiversity Conservation Act 1999* and the *Wildlife Conservation Act 1950* (Blueprint Environmental Strategies, 2014). A Level 1 fauna and habitat survey was conducted by Western Wildlife on 28 - 29 July 2014. Three main habitats for fauna were identified during the site visit: Mallee woodland; Eucalypt Woodland over *Allocasuarina* shrubland; Rehabilitation area (on waste dump); and Cleared land (pit area). Given there has been some previous ground disturbance and recent fire disturbance through much of the application area, potential impacts are likely to be small on both a local and regional scale, as only a small area of fauna habitat will be disturbed within a very large tract of intact woodland (Western Wildlife, 2014).

The application area is within the buffer zone of the Ironcap Hills vegetation complex Priority Ecological Community (PEC) a Priority 3 PEC (GIS Database; Blueprint Environmental Studies, 2014). This PEC includes Mt Holland, Middle Ironcap Hill, North and South Ironcap Hills, Digger Rock and Hatter Hill. This PEC mainly targets and encompasses the banded ironstone formations within this region, which are not present within the application area (Kidman Resources Limited, 2017). The proposed clearing is not likely to have an impact on this PEC.

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

**Methodology** Blueprint Environmental Strategies (2014)  
DPAW (2017)  
Native Vegetation Solutions (2014)  
Western Wildlife (2014)

GIS Database:  
- IBRA WA (Regions - Subregions)  
- Threatened Ecological Sites Buffered

**(b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.**

**Comments Proposal may be at variance to this Principle**

A search of the Department of Parks and Wildlife (DPAW) Naturemap identified that 9 frog, 60 reptile, 113 bird and 31 mammal species have the potential to be within a 50 kilometre radius of the application area (DPAW, 2017). A Level 1 fauna and habitat survey was conducted by Western Wildlife on 28 to 29 July 2014. Three fauna habitats were identified within the application area. These being:

- Mallee Woodland
- Eucalypt Woodland over *Allocasuarina* shrubland
- Cleared land (airstrip, roads, etc)

Similar habitats identified during the fauna survey of the application area have also been recorded in the greater surrounding area (Western Wildlife, 2014). While the application area may provide important fauna habitat, the surrounding area is largely vegetated with intact woodland (Western Wildlife, 2014) and also provides suitable fauna habitat.

Based on habitats available and known distributions, a total of 17 Schedule or Priority fauna species may potentially occur in the area: Carpet Python (*Morelia spilota subsp. imbricata*), Lake Cronin Snake (*Paraplocephalus atriceps*), Spotted Knob-tail (*Nephrurus stellatus*), Malleefowl (*Leipoa ocellata*), Carnaby's Black Cockatoo (*Calyptrorhynchus latirostris*), Peregrine Falcon (*Falco peregrinus*), Rainbow Bee-eater (*Merops ornatus*), Fork-tailed Swift (*Apus pacificus*), Inland Western Rosella (*Platycercus icterotis*), Shy Heathwren (*Hylacola cauta*), White-browed Babbler (*Pomatostomus superciliosus*), Crested Shrike-tit (*Famcunculus frontatus*), Crested Bellbird (*Oreoica gutturalis*), Chuditch (*Dasyurus geoffroii*), Red-tailed Phascogale (*Phascogale calura*), Western Brush Wallaby (*Macropus irma*), Central Long-eared Bat (*Nyctophilus*

*tomoriensis*) (Western Wildlife, 2014).

Some of the conservation significant species are considered to be highly mobile, have a wide distribution and/or are able to utilise a wide range of habitat types so the clearing is unlikely to significantly impact on the species (Western Wildlife, 2014). Other species are known mostly from historical records and based on their current distribution these species are not expected to be found in the surrounding area (Western Wildlife, 2014). Of the above mentioned fauna, the following two species are considered most likely to potentially be impacted by the proposed clearing.

Carnaby's Cockatoos (Schedule 1 - Fauna that is rare or likely to become extinct, *Wildlife Conservation (Specially Protected Fauna) Notice, 2012*) forage in woodland and heath that is dominated by proteaceous species and nest in hollows of large eucalypts, usually Salmon Gum and Wandoo (DPaW, 2012a). There are several records of this species on DPAW's Naturemap, all from the Forrestania area between 1981 and 2009 (Western Wildlife, 2014). Although not recorded during the site visit, Carnaby's Black Cockatoo may forage in the tall *Allocasuarina* shrublands and eucalypt woodlands in the application area and surrounds. It is unlikely to breed in the application area due to the lack of large hollow-bearing eucalypts (Western Wildlife, 2014). Generally the study area is on the eastern limits of the current range of this species, so Carnaby's Black Cockatoo is only likely to be an occasional or seasonal foraging visitor (Western Wildlife, 2014).

Malleefowl (Schedule 1 - Fauna that is rare or likely to become extinct, *Wildlife Conservation (Specially Protected Fauna) Notice, 2012*) are largely confined to arid and semi-arid woodland that is dominated by Mallee eucalypts on sandy soils, with less than 430 millimetres of rainfall annually (DPaW, 2012b). There are records of Malleefowl being within the 40 kilometre search radius of the application area on DPAW's Naturemap website (DPaW, 2017) and an inactive Malleefowl mound was recorded during the site visit outside of the application area (Western Wildlife, 2014). The inactive mound appears to have been unused for at least four years, if not more (Western Wildlife, 2014). As the area it was situated in was recently burnt, it is unlikely to be used until the woodland has regenerated sufficiently to provide leaf litter for use in nest construction. Based on the above, it is considered unlikely that the proposed clearing will impact on Malleefowl or Malleefowl nests.

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

**Methodology** DPAW (2017)  
DPAW (2012a)  
DPAW (2012b)  
Western Wildlife (2014)

**(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.**

**Comments Proposal may be at variance to this Principle**

According to available databases, there is one record of Threatened Flora adjacent to the application area (Kidman Resources, 2017; Native Vegetation Solutions, 2014; GIS Database). A targeted significant flora survey of the application area and surrounds identified the Threatened flora species *Banksia sphaerocarpa* var. *Dolichostyla* (Ironcaps Banksia) as being adjacent to the application area (Kidman Resources, 2017; Native Vegetation Solutions, 2014).

The *Banksia sphaerocarpa* var. *dolichostyla* is a shrub or small tree growing to four metres and spreading to four metres in diameter with golden/yellow flowers (George 1981, 1999; Hopper *et al.* 1990) and a dense canopy (Hopper *et al.* 1990). This species occurs just to the east of the cleared southern wheatbelt in south-western Western Australia. It grows between Mt Holland and South Ironcap, east of Hyden, on vacant Crown Land (Brown *et al.* 1998). Surveys carried out in 1989/90 showed seven populations totalling over 2,400 plants (see table below). By 1994 there were nine populations with a total of about 6,500 plants. The impact of a 1994 fire is not known (Brown *et al.* 1998).

A management plan for *Banksia sphaerocarpa* var. *dolichostyla* was developed in 2014 to support Mining Proposal Reg ID 53033 and was subsequently accepted by the Department of Parks and Wildlife. Although no disturbance of *Banksia sphaerocarpa* var. *dolichostyla* is proposed under this clearing permit application, Kidman is committed to complying with the management plan (Kidman Resources Limited, 2017).

Kidman Resources Limited (2017) has identified that the proposed clearing area is considered unsuitable for *Banksia sphaerocarpa* var. *dolichostyla*, and that clearing will be undertaken within existing disturbance areas only. Kidman Resources Limited (2017) has also stated a preclearance survey will be undertaken to identify and mark all individuals in proximity to the clearing envelope to ensure disturbance is avoided. Potential impacts to this flora species may be further minimised by the implementation of a flora management condition.

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

**Methodology** Brown *et al.* (1998)  
George (1981)  
George (1999)

Hopper *et al.* (1990)  
 Kidman Resources Limited (2017)  
 Native Vegetation Solutions (2014)

GIS Database:  
 - Threatened and Priority 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.**

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

According to available databases, there are no records of any Threatened Ecological Communities (TECs) within the application area (GIS Database). The nearest known TEC is located approximately 150 kilometres south-west of the application area (GIS Database).

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

**Methodology** GIS Database:  
 - Threatened Ecological Sites Buffered

**(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.**

**Comments Proposal is not at variance to this Principle**

The application area falls within the Coolgardie Biogeographic Regionalisation for Australia (IBRA) bioregion (GIS Database). The vegetation of the application area has been broadly mapped as Beard vegetation association 519: Shrublands: mallee scrub, *Eucalyptus eremophila* (GIS Database).

This vegetation association remains at approximately 61.71% and 99.57% of pre-European extent, at the state and bioregion levels respectively (see table below). Therefore, the area proposed to be cleared does not represent a significant remnant of native vegetation within an area that has been extensively cleared.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in DPAW Managed Lands
IBRA Bioregion - Coolgardie	12,912,204	12,648,491	~97.96	Least Concern	16.39
Beard vegetation associations - State					
519	2,333,414	1,440,063	~61.71	Least Concern	14.57
Beard vegetation associations - Bioregion					
519	147,579	146,943	~99.57	Least Concern	10.67

\* Government of Western Australia (2015)

\*\* Department of Natural Resources and Environment (2002)

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

**Methodology** Department of Natural Resources and Environment (2002)  
 Government of Western Australia (2015)

GIS Database:  
 - IBRA WA (Regions - Subregions)  
 - Pre-European Vegetation

**(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.**

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

There are a series of non-perennial lakes to the east of the application area and parts of the application area may be subject to inundation (DAFWA, 2014; GIS Database). However, a vegetation survey of the application area by botanists from Native Vegetation Solutions did not identify any vegetation growing in, or in association with, a watercourse or wetland (Native Vegetation Solutions, 2014; Kidman Resources Limited, 2017).

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

**Methodology** DAFWA (2014)  
Native Vegetation Solutions (2014)  
Kidman Resources Limited (2017)

GIS Database:  
- Hydrography, Linear

**(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.**

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

The application has been mapped as soil type Ya28, which Northcote (1960-68) describes as sandy plains with some clay pans and small salt lakes, dunes and lunettes; chief soils are sandy alkaline mottled yellow soils. The topography of the application area is relatively flat (GIS Database).

The majority of the application area has been previously disturbed with no appreciable land degradation (Kidman Resources Limited, 2017). Flora and vegetation within the application area being extremely limited and disturbed, comprising some regrowth within the airstrip area and along the extreme perimeter of the tenement (Kidman Resources Limited, 2017).

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

**Methodology** Blueprint Environmental Strategies (2014)  
Kidman Resources Limited (2017)

GIS Database:  
- Soils, Statewide

**(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.**

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

There are no conservation areas within the vicinity of the application area (GIS Database). The nearest conservation area is the Jilbadji Nature Reserve which is located approximately eight kilometres north of the application area (GIS Database). The proposed clearing is unlikely to have any significant impact on this or any other conservation area.

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

**Methodology** GIS Database:  
- DPaW Tenure  
- Reserves

**(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.**

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

The application area is not within a Public Drinking Water Source Area (GIS Database). There are no permanent watercourses within the application area so any surface water present is likely to occur as sheet flow or ephemeral drainage lines (GIS Database). The application area experiences an average annual rainfall of approximately 344.4 millimetres, falling mainly during the winter months (BoM, 2017).

The application area is located in a relatively flat to slightly undulating area which may on occasion be at risk of flooding following intense rainfall events. All watercourses within the application area are ephemeral and for the majority of the year, the drainage systems are dry.

Some localised increase in surface runoff may occur where vegetation is cleared. However, the impact is unlikely to be detectable in the context of the range of the natural variability of runoff (Blueprint Environmental Strategies, 2014). Any potential effects will be short term as all disturbed areas will be rehabilitated in accordance with the Mine Closure Plan for the Project (Kidman Resources Limited, 2017). Given the above, the proposed clearing is not likely to have any significant impact on surface water quality in the area.

The application area is located within the Yilgarn-Southwest Groundwater Province (GIS Database). The groundwater salinity within the application area is approximately 14,000 - 35,000 milligrams/Litre Total Dissolved Solids (TDS) (GIS Database). Vegetation is not likely to be dependent on groundwater at such a hyper saline level. Given the size of the area to be cleared (30 hectares) compared to the size of the Yilgarn-Southwest Groundwater Province (24,601,260 hectares) (GIS Database), the proposed clearing is not likely to cause salinity levels within the application area to alter significantly. Also, the depth of the water table in the application area, being over 80 metres below the surface, means there is not likely to be any connectivity

between surface vegetation and groundwater (Blueprint Environmental Strategies, 2014). The proposed clearing is not likely to deteriorate groundwater quality in the local area.

There are no known groundwater dependent ecosystems within the application area (GIS Database).

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

**Methodology** BoM (2017)  
Blueprint Environmental Strategies (2014)  
Kidman Resources Limited (2017)

GIS Database:  
- Groundwater Provinces  
- Groundwater Salinity, Statewide  
- Potential Groundwater Dependent Ecosystems – DoE 2004  
- Public Drinking Water Source Area (PDWSAs)

**(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.**

**Comments** **Proposal is not likely to be at variance to this Principle**  
With an average annual rainfall of 400 millimetres and an average annual evaporation rate of 2,400 millimetres there is likely to be little surface flow during normal seasonal rains (GIS Database). Whilst large rainfall events may result in the flooding of the area, the proposed clearing is not likely to lead to an increase in incidence or intensity of flooding (Blueprint Environmental Strategies, 2014).

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

**Methodology** Blueprint Environmental Strategies (2014)

GIS Database:  
- Evaporation Isopleths  
- Rainfall, Mean Annual

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

**Comments**  
There are no native title claims over the area under application (Department of Aboriginal Affairs, 2017). 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*.

According to available databases, there are no registered Aboriginal Sites of Significance within the application area (Department of Aboriginal Affairs, 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 Environment Regulation, 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 clearing permit application was advertised on 8 May 2017 by the Department of Mines and Petroleum inviting submissions from the public. There were no submissions received.

**Methodology** Department of Aboriginal Affairs (2017)

**4. References**

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- Government of Western Australia (2015) 2015 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2015. WA Department of Parks and Wildlife, Perth.
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- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Kidman Resources Limited (2017) Assessment of Clearing Principles - Mt Holland Project – Airstrip Clearing on L77/107. Report prepared by Kidman Resources Limited, March 2017.
- Native Vegetation Solutions (2014) Flora and Vegetation Survey of the Proposed Blue Vein Mine - Mt Holland Operation. Report prepared for Convergent Minerals Limited, September 2014.
- Western Wildlife (2014) Blue Vein Mine, Mt Holland Project. Level 1 Fauna Survey 2014. Report for Convergent Minerals Limited, October 2014.

## 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>DEE</b>	Department of the Environment and Energy, Australian Government
<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>DoE</b>	Department of the Environment, Australian Government (now DEE)
<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 DEE)
<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.