



# Clearing Permit Decision Report

## 1. Application details

### 1.1. Permit application details

Permit application No.: 7551/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: **Quadrant Northwest Pty Ltd**

### 1.3. Property details

Property: Production Licence TL/6  
Local Government Area: Shire of Ashburton  
Colloquial name: Varanus Island

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
24.93		Mechanical Removal	Petroleum Production and Associated Activities

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 8 June 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 and are useful to look at vegetation in a regional context. One Beard vegetation association has been mapped within the application area:

**Beard Vegetation Association 117:** Hummock grasslands, grass steppe, soft Spinifex (*Triodia pungens*).

Six vegetation associations have been identified on the island during previous flora surveys (Apache, 2006). These included:

- 1) Low (to 20 cm) open hermland of *Frankenia pauciflora* on exposed limestone, that is exposed to wind and sea spray and has poorly developed soil;
- 2) Low (to 50 cm) open shrubland of *Scaevola spinescens*, *Rhagodia preissii* and *Sarcostemma viminale* subsp *australe* (formerly *S. australe*) on limestone plains and ridges inland from the exposed coastal limestone;
- 3) Low (to 50 cm) open shrubland of *Sarcostemma viminale* subsp *australe*, *Capparis spinosa* and *Pittosporum phylliraeoides* on more sheltered and inland parts of undulating limestone terrain;
- 4) Open grassland of *Spinifex longifolius* on white sands of coastal dunes;
- 5) Closed mixed grassland/herbland of *Setaria dielsii* and *Amaranthus pallidiflorus* on the deeper orange sands of inland plains;
- 6) Low (to 50 cm) open shrubland of *Sarcostemma viminale* subsp *australe* with mixed grassland on orange sand particularly where it is shallow over limestone.

**Clearing Description** Varanus Island Project.  
Quadrant Northwest Pty Ltd proposed to clear up to 24.93 hectares of native vegetation within a total boundary of approximately 28.5 hectares, for the purpose of petroleum production and associated activities. The project is located approximately 58 kilometres off the Pilbara coast, in the Shire of Ashburton.

**Vegetation Condition** Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994);

To:

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

**Comment** Clearing permit CPS 1359/1 was granted in 2007 and covered the same area as applied under CPS 7551/1. CPS 1359/1 was held in the name of Apache Northwest Pty Ltd and expired on 24 February 2012. CPS 7551/1 is required to cover clearing activities listed within the expired permit area. The proponent is also proposing to incorporate the area and activities approved under CPS 997/2 (still live permit) into CPS 7551/1. CPS 997/2 approved the clearing of up to 8.36 hectares of native vegetation for the purpose of fire risk reduction and maintenance activities.

The vegetation condition was derived via information obtained from the previous pipeline operator (Apache, 2006)

### 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 to clear 24.93 hectares will allow for ongoing small-scale clearing of native vegetation for a number of purposes including the construction and maintenance of buildings and infrastructure, which will also aid in fire risk reduction. The 24.93 hectares applied to be cleared makes up approximately 34.5% of the Varanus Island lease area, however large portions have already been cleared or disturbed for historic petroleum related activities (Quadrant, 2017; GIS Database). The vegetation under application is considered to be in predominantly 'Completely Degraded' (Keighery, 1994) condition, with only small areas of 'Very Good' (Keighery, 1994) condition vegetation remaining (GIS Database).

The Montebello and Barrow Islands region contains a high diversity of marine habitat types, which in turn supports a high diversity of species (DEC, 2006). The subtidal coral reef communities have a high diversity of invertebrates with over 150 species of hard corals recorded from fringing and patch coral reef areas (DEC, 2006).

The application area is located on Varanus Island and forms part of the Lowendal Islands group which are vested as Nature Reserves (Quadrant, 2017). These islands provide nesting sites for Green, Hawksbill and Flatback turtles. The proponent currently has a 21 year lease granted over a portion of the Nature Reserve (40323) for the purpose of constructing, operating, inspecting, maintaining and repairing an onshore pipeline. Lease conditions require Quadrant Energy to have an Environmental Management Plan in place and to undertake regular environmental monitoring and prepare annual reports to Office of the Environmental Protection Authority (OEPA) and the Department of Parks and Wildlife (DPaW).

The vegetation of Varanus Island is broadly described as 'desertic' and is dominated by hummock grasslands (*Triodia* spp.); however there are three locally significant vegetation communities, all of which occur outside the application area (Quadrant, 2017). A number of Priority listed flora species are known from the island; however no Threatened or Priority flora species have been recorded within the application area (Apache, 2006; Astron, 2017; DPaW, 2017a, Quadrant, 2017). Much of the vegetation within the clearing application area has been previously disturbed, and the biodiversity of the application area is substantially less than the remainder of the island. DPaW (2017b) did not raise any concerns or issues with the proposed clearing.

Monitoring surveys have identified one hundred and sixteen species of flora taxa since the vegetation monitoring program began in 1985. Of these, 16 are listed as weeds and eight are native mainland species that have been introduced (Astron, 2017). Recent flora and vegetation monitoring has demonstrated that no new impacts to flora and vegetation on Varanus Island have occurred as a result of operations (Astron, 2017).

No Threatened flora, TECs or PECs have been recorded within the application area (DPaW, 2017a; GIS Database) and none have been recorded during flora surveys (Quadrant, 2017).

Given existing management measures and the highly compromised setting in which the application area is located, adverse impacts to the biodiversity of the island are unlikely to arise as a result of the proposed clearing.

As mentioned above, multiple weed species have been recorded on the island. Weeds have the potential to alter the biodiversity of an area, competing with native vegetation for available resources and making areas more fire prone. Potential impacts to biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

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

**Methodology** Astron (2017)  
CALM (2002)  
DEC (2006)  
DPaW (2017a)  
DPaW (2017b)  
Keighery (1994)  
Quadrant (2017)

GIS Database:  
- IBRA Australia  
- Imagery  
- Pre-European vegetation  
- 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 is not likely to be at variance to this Principle**

Varanus Island is an important breeding ground for many migratory seabird species and is particularly important for a number of tern (Laridae family) species (CALM, 2002). Of these species, the Wedge-tailed Shearwater (*Puffinus pacificus*- IA) breeding site is situated closest to the application area. As part of existing lease conditions, annual shearwater monitoring is being undertaken. Recent results have demonstrated that no impacts to Wedge-tailed shearwater have occurred as a result of operations (Quadrant, 2017).

There are no native mammals found on the island, although a number of reptile species are known to occur. Short-range Endemic (SRE) surveys have revealed the presence of at least three taxa, which could be considered SRE species, and have not yet been recorded elsewhere (Quadrant, 2017).

The vegetation of the application area occurs as small fragmented remnants, the majority of which have been previously disturbed. As a result, these remnants are unlikely to represent a significant habitat for local fauna species. The vegetation associations and habitat types within the application area are well represented on other parts of Varanus Island (Apache, 2006), and the proposed clearing is unlikely to have any significant impact on the fauna habitats of the island.

Given that the proposed clearing is located within or immediately adjacent to previously disturbed areas, and that existing management measures are in place, significant impacts to local fauna species and/or habitats are not anticipated.

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

**Methodology** Apache (2006)  
CALM (2002)  
Quadrant (2017)

GIS Database:  
- Imagery  
- Threatened Fauna

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

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

According to available databases, no Threatened flora species have been recorded on Varanus Island (DPaW, 2017a; GIS Database). Varanus Island has been extensively surveyed and no Threatened flora species have been recorded (Quadrant, 2017).

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

**Methodology** DPaW (2017a)  
Quadrant (2017)

GIS Database  
- Threatened and Priority Flora List

**(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 at variance to this Principle**

According to available databases, there are no known Threatened Ecological Communities (TECs) mapped on Varanus Island. The application area was surveyed by Aston Environmental Services in 2007 and 2008 and no TECs were identified (Quadrant, 2017)

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

**Methodology** Quadrant (2017)

GIS Database:  
- Threatened Ecological Sites Buffered  
- Threatened Ecological Sites Boundaries

**(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**

Varanus Island is the largest island in the Lowendal Islands group. The Lowendal Islands lie off the Pilbara coast, however the Western Australian Biodiversity Audit (CALM, 2002), classified the Lowendal Islands as falling within the Cape Range subregion of the Carnarvon Bioregion. The vegetation within the application area

is mapped as Beard vegetation association 117 (GIS Database). The proposed clearing of up to 24.93 hectares represents approximately 29.3% of the islands area, however the majority of the vegetation to be cleared is considered to be in a 'Completely Degraded' (Keighery, 1994) condition.

The vegetation within the application area has been mapped as Beard vegetation associations 117 (GIS Database). As the below table illustrates, Beard vegetation association 117 is well represented, retaining at least 87.8% of pre-European vegetation within the State and the bioregion (Government of Western Australia, 2015). Given the amount of vegetation remaining in the local area and bioregion, the vegetation proposed to be cleared is not considered to represent a remnant within an extensively cleared area.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in DPaW Managed Lands
IBRA Bioregion - Carnarvon	8,382,890	8,360,801	~99.7	Least Concern	~12.2
Beard vegetation associations - State					
117	897,108	883,705	~98.5	Least Concern	~15.2
Beard vegetation associations - Bioregion					
117	12,424	10,908	~87.8	Least Concern	~27.5

\* Government of Western Australia (2016)

\*\* 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 (2016)

GIS Database:  
- IBRA Australia  
- 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 no permanent watercourses or waterbodies on Varanus Island (GIS Database). Some of the vegetation present on the island is associated with marine habitats, but is not considered to be riparian.

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

**Methodology** GIS Database:  
- Geodata, Lakes  
- 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**

Varanus Island is approximately 2.5 km long and approximately 600m wide at its widest point. Its highest point is approximately 30m above sea level. The soils consist of shallow sands over limestone, and the topography of the island ranges from flat to undulating low dunes (Apache, 2006; CALM 2002; Quadrant, 2017). Groundwater is heavily influenced by tidal patterns and is saline (Quadrant, 2017).

Given the prevailing environmental conditions, the proposed clearing is not expected to result in or cause appreciable land degradation issues such as erosion or increased soil salinity.

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

**Methodology** Apache (2006)  
CALM (2002)  
Quadrant (2017)

**(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**

The application area is situated on Varanus Island and forms part of the Lowendal group of islands which have been declared as a 'C' class Nature Conservation Reserve. The Lowendal Islands are managed by the

Department of Parks and Wildlife. Varanus Island is also on the Register of National Estate (DoEE, 2017) and is considered to be an Environmentally Sensitive Area (ESA) (Quadrant, 2017; GIS Database).

The vegetation to be cleared is predominantly in a completely degraded condition and occurs within an area currently used for petroleum production activities, with existing disturbance and infrastructure a feature. The proposed clearing is unlikely to have any impact on the conservation values of the Nature Reserve. Sensitive areas (i.e. Wedge-tailed Shearwater (*Ardenna pacifica*) breeding areas) that remain on the island have been excluded from the application area. DPaW (2017b) did not raise any concerns or issues with the proposed clearing.

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

**Methodology** DPaW (2017b)  
DoEE (2017)  
Quadrant (2017)

GIS Database  
- DPaW Tenure

**(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**

There are no permanent watercourses or waterbodies on Varanus Island (GIS Database). The Island is well drained and relatively flat with shallow sandy soils (Quadrant, 2017). Stormwater predominantly infiltrates into the ground and runoff is minimal (Quadrant, 2017; GIS Database). Adverse impacts to surface water quality are not anticipated.

Groundwater recharge is predominantly from rainfall infiltration. However, a significant portion of the lease area is sealed, resulting in reduced or negligible infiltration in those areas (Quadrant, 2017). The watertable level and groundwater flow patterns are subject to tidal influence and is saline (Quadrant, 2017). Investigations indicate that the watertable over most of the lease area lies at a mean elevation of 1.8 m at low tide and 2.6 m above sea level at high tide, corresponding to a daily height variation of 0.8 m (Quadrant, 2017).

Given that groundwater is heavily influenced by tidal patterns, the proposed clearing is unlikely to cause any further deterioration to the groundwater level or quality.

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

**Methodology** Quadrant (2017)

GIS Database:  
- Hydrography, Linear

**(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**

There are no permanent wetlands or watercourses on Varanus Island and any brief occurrence of surface water is limited to significant rainfall events. Varanus Island has an arid, sub-tropical climate, and receives variable summer and winter rainfall with an average annual rainfall of approximately 294 mm per annum (BoM, 2017; CALM, 2002). The region is prone to seasonal cyclones and natural flooding may occur occasionally during the wet season (November to March). However the application area is located on coastal sand-dunes, and the highly permeable sandy soils reduce the potential for local flooding.

The proposed clearing of up to 24.93 hectares of native vegetation will have a negligible impact on the incidence or intensity of flooding in this climatic and environmental setting.

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

**Methodology** BoM (2017)  
CALM (2002)

GIS Database:  
- Hydrography, Linear

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

### Comments

There are no Native Title claims over the area under application (DAA, 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 (DAA, 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, the Department of Parks and Wildlife and the Department of Water, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works

The clearing permit application was first advertised on 1 May 2017 and re-advertised on 29 May 2017 by the Department of Mines and Petroleum inviting submissions from the public. No submissions were received.

**Methodology** DAA (2017)

## 4. References

- Apache (2006) Supporting documentation for Native Vegetation Clearing Permit (Purpose Permit) CPS 1359/1. Apache Energy, Western Australia.
- Astron (2017) Varanus Island Flora and Vegetation Monitoring Report Annual Report 2016. Prepared for Quadrant Energy. Astron Environmental Services, Perth, WA. January 2017
- BoM (2017) Climate Statistics for Australian Locations. A Search for Climate Statistics for Barrow Island, Australian Government Bureau of Meteorology. [www.bom.gov.au](http://www.bom.gov.au) (Accessed May 2017).
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Department of Conservation and Land Management, Western Australia.
- DAA (2017) Aboriginal Heritage Enquiry System. Department of Aboriginal Affairs. <http://maps.dia.wa.gov.au/AHIS2/> (Accessed May 2017).
- Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.
- DoEE (2017) Archived Australian Heritage Database, Lowendal Islands, via Barrow Island, WA, Australia. Accessed via [www.environment.gov.au](http://www.environment.gov.au), May 2017.
- DEC (2006) Biodiversity advice for CPS 1359/1 - Department of Environment and Conservation, Biodiversity Coordination Section, Western Australia, 2006.
- DPaW (2017a) NatureMap. Department of Parks and Wildlife, <http://naturemap.dec.wa.gov.au> (Accessed May 2017).
- DPaW (2017b) Advice received in relation to Clearing Permit Application CPS 7551/1. Department of Parks and Wildlife, Conservation and Developments Management Branch, Pilbara Region, Western Australia, June 2017.
- Government of Western Australia (2016) 2016 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2016. WA Department of Parks and Wildlife, Perth.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Quadrant (2017) Varanus Island Supporting documentation for Native Vegetation Clearing Permit CPS 7551/1. Quadrant Energy Australia Ltd, April 2017.

## 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

ha	Hectare (10,000 square metres)
IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
PEC	Priority Ecological Community, Western Australia
RIWI Act	<i>Rights in Water and Irrigation Act 1914</i> , Western Australia
TEC	Threatened Ecological Community

### **Definitions:**

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

<b>T</b>	<p><b>Threatened species:</b> Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, 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).</p> <p><b>Threatened fauna</b> is that subset of ‘Specially Protected Fauna’ declared to be ‘likely to become extinct’ pursuant to section 14(4) of the Wildlife Conservation Act.</p> <p><b>Threatened flora</b> 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.</p> <p>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.</p>
<b>CR</b>	<p><b>Critically endangered species</b> Threatened species considered to be facing an extremely high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.</p>
<b>EN</b>	<p><b>Endangered species</b> Threatened species considered to be facing a very high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.</p>
<b>VU</b>	<p><b>Vulnerable species</b> Threatened species considered to be facing a high risk of extinction in the wild. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.</p>
<b>EX</b>	<p><b>Presumed extinct species</b> 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 <i>Wildlife Conservation Act 1950</i>, 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.</p>
<b>IA</b>	<p><b>Migratory birds protected under an international agreement</b> 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 <i>Wildlife Conservation Act 1950</i>, in Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice.</p>
<b>CD</b>	<p><b>Conservation dependent fauna</b> 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 <i>Wildlife Conservation Act 1950</i>, in Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice.</p>
<b>OS</b>	<p><b>Other specially protected fauna</b> Fauna otherwise in need of special protection to ensure their conservation. Published as Specially Protected under the <i>Wildlife Conservation Act 1950</i>, in Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice.</p>
<b>P</b>	<p><b>Priority species</b></p>

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.