

# **Clearing Permit Decision Report**

#### 1. Application details 1.1. Permit application details Permit application No.: 8000/2 Permit type: **Purpose Permit** 1.2. **Proponent details** Proponent's name: Northern Star (Carosue Dam) Pty Ltd 1.3. Property details Property: Mining Lease 28/166 Mining Lease 28/167 Mining Lease 28/245 Mining Lease 28/269 Mining Lease 31/220 Mining Lease 31/295 Local Government Area: Shire of Menzies and City of Kalgoorlie-Boulder **Colloquial name:** Carosue Dam Expansion Project 1.4. Application Clearing Area (ha) No. Trees Method of Clearing For the purpose of: 375 Mechanical Removal Mineral Production and Associated Activities 1.5. Decision on application Decision on Permit Application: Grant Decision Date: 10 March 2022

## 2. Site Information

## 2.1. Existing environment and information

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

**Vegetation Description** The vegetation of the application area is broadly mapped as the following Beard vegetation associations:

Beard vegetation association 20: Low woodland; mulga mixed with *Allocasuarina cristata* and *Eucalyptus* sp; and Beard vegetation association 24: Low woodland; *Allocasuarina cristata* (GIS Database).

This application is an amalgamation of several granted and expired native vegetation clearing permits, and numerous flora and vegetation surveys have been conducted over the application area. The following vegetation associations were recorded within the application area from various vegetation surveys conducted by Alexander Holm and Associates (Holm) and Mattiske Consulting (Mattiske) between 2006 and 2012 (Saracen, 2018):

#### Tailings Storage Facility Expansion Project (CPS 5426/2):

2a: Low lateritic rises – Very sparse woodland (to 10 metrés) of Casuarina obesa with very sparse mid-height shrub layers dominated by Eremophila scoparia, Scaevola spinescens, Senna artemisioides subsp. filifolia and Acacia colletioides.

**2b:** Low rises on basaltic or metamorphic rocks – Very sparse to mid-dense mixed height degraded chenopod shrublands dominated by *Dodonaea lobulata*, *Senna artemisioides* subsp. *filifolia*, *Acacia burkittii*, *Ptilotus obovatus* with isolated to very sparse tree layer (6 to 15 metres) of *Casuarina obesa* and occasionally *A. incurvaneura*, *Grevillea nematophylla* subsp. *nematophylla* and/or *Alectryon oleifolius*. Less frequently shrublands dominated by *Maireana sedifolia*;

**2c:** Sandy rises – Sparse woodlands dominated by *Acacia incurvaneura* and low mallees including *Eucalyptus eremicola*, *E. ceratocorys* and *E. oldfieldii* over a diverse sparse shrubland with spinifex (*Triodia irritans*) often dominated by myrtaceous shrubs. Shrubs include *Eremophila forrestii* subsp. forrestii, *Thryptomene kochii*, *Verticordia pritzelii*, *Prostanthera althoferi* subsp. althoferi and *Acacia effusifolia*;

**4a:** Plains supporting eucalypt or acacia shrublands – Very sparse tall Acacia shrublands (4 to 6 metres) dominated by *Acacia incurvaneura*, *A. aptaneura* or sparse mid height Acacia shrublands dominated by *A. burkittii* with overstoreys of isolated *Casuarina obesa* or *Eucalyptus oleosa* subsp. *oleosa* and lower shrubs including *Dodonaea lobulata*, *Senna artemisioides* subsp. *filifolia* and *Ptilotus obovatus*;

**4b:** Sand plains supporting sparse eucalypt woodlands – Very sparse eucalypt woodland (6 to 10 metres) of *Eucalyptus flocktoniae* subsp. *flocktoniae*, *E. yilgarnensis* and *E. oleosa* subsp. *oleosa* over mixed height, very sparse shrubs including Eremophila caperata, Acacia colletioides and Westringia rigida and mid-dense Triodia *irritans*; and 5: Alluvial plains supporting chenopod shrublands – Very sparse to sparse mixed height chenopod shrublands dominated by *Maireana sedifolia, M. georgei, M. pyramidata, Atriplex vesicaria, Ptilotus obovatus* and others or in poor condition dominated by *Senna artemisioides* subsp. *filifolia, Eremophila scoparia, Dodonaea lobulata* and *Acacia burkittii* overtopped with isolated and clumped tree layer of *Casuarina obesa, Eucalyptus brachycorys* and *E. lesouefii* (Holm, 2012).

#### Whirling Dervish Stage 3 (CPS 4150/1):

**CEAS:** Scattered to mid-close acacia tall shrubland with *Casuarina pauper* and/or eucalypt overstoreys over low shrublands dominated by *Acacia burkittii*, with mixed shrubs including A. *tetragonophylla*, *A. hemiteles*, *Eremophila metallicorum*, *Senna artemisioides* subsp. *filifolia* and *Dodonaea rigida*;

**CCAS:** Scattered to mid-close acacia tall shrublands with *Casuarina pauper* and eucalypt overstoreys over midlow shrublands dominated by *Acacia burkittii* and *Senna artemisioides* subsp. *filifolia,* with other shrubs including *Ptilotus obovatus, Scaevola spinescens, Olearia muelleri, Eremophila decipiens* and *E. metallicorum;* and

**DRXT:** Sparse to mid-close eucalypt and mulga woodlands and occasional thickets over open to mid-close shrublands often dominated by *Acacia burkittii* or less commonly *Bursaria occidentalis*. Other common species include A. *hemiteles, Senna artemisioides* subsp. *filifolia, Grevillea stenobotrya* and *Spartothamnella teucriiflora* (Holm, 2010).

#### Karari Stage 3 (CPS 3833/2):

E1: Low open woodland of *Éucalyptus oleosa* subsp. *oleosa* over an open scrub of *Acacia aneura* var. *intermedia* and *Acacia ayersiana* with occasional *Casuarina pauper* over low to open low shrubland of *Acacia burkittii, Acacia ramulosa* var. *ramulosa, Dodonaea lobulata, Senna artemisioides* subsp. *filifolia, Ptilotus obovatus, Maireana sedifolia* and *Maireana georgei* on red clay loam flats and minor drainage areas;

E2: Woodland to open woodland of *Eucalyptus salmonophloia* occasionally with *Eucalyptus lesouefii* and *Eucalyptus concinna* over low shrubland to open low shrubland of *Eremophila scoparia*, *Senna artemisioides* subsp. *filifolia*, *Acacia hemiteles*, *Atriplex vesicaria*, *Atriplex nummularia*, *Dodonaea lobulata*, *Maireana sedifolia* and *Maireana triptera* on shallow calcrete red/brown clay loams often with a fine calcrete or ironstone mantle;

E3: Low open woodland of Eucalyptus oleosa subsp. oleosa over scrub of Acacia aneura var. intermedia, Acacia ayersiana and Grevillea nematophylla over an open low shrubland of Acacia burkittii, Acacia tetragonophylla, Acacia ramulosa var. ramulosa, Scaevola spinescens, Dodonaea lobulata, Dodonaea rigida, Spartothamnella teucriiflora, Senna artemisioides subsp. filifolia and Ptilotus obovatus on red clay loam flats and wash plains, with a mantle of ironstone and calcrete pebbles;

**C1:** Open low woodland of *Casuarina pauper* over an open low shrubland of *Scaevola spinescens, Acacia nyssophylla, Eremophila scoparia, Eremophila glabra, Dodonaea lobulata, Eremophila oldfieldii* subsp. *angustifolia, Senna artemisioides* subsp. *filifolia* on slopes and flats in shallow red/brown clay loams on calcrete often with rocky calcrete, ironstone and quartz mantles;

**C2:** Open low woodland of *Casuarina pauper* with occasional *Acacia* and *Eucalyptus* species over an open low shrubland of *Olearia muelleri, Ptilotus obovatus* and *Senna artemisioides* subsp. *filifolia* on rocky calcrete rises with red/brown clay loam;

**C3:** Open low woodland of *Casuarina pauper* and occasionally *Eucalyptus concinna* over a scrub of *Acacia ayersiana, Acacia aneura* var. *intermedia* and *Grevillea nematophylla* over an open low shrubland of *Scaevola spinescens, Dodonaea rigida, Senna artemisioides* subsp. *filifolia, Acacia kempeana* and *Ptilotus obovatus* on red clay loam on flats often with a fine ironstone mantle;

**S1:** Scrub of Acacia ayersiana and Grevillea nematophylla with occasional Casuarina pauper and Eucalyptus species over a low to open low shrubland of Acacia tetragonophylla, Senna artemisioides subsp. filifolia, Ptilotus obovatus, Dodonaea rigida and Scaevola spinescens on red clay loam flats;

A1: Closed scrub of Acacia aneura var. intermedia to open scrub of Acacia burkittii and Acacia tetragonophylla over open low shrubland of Eremophila oldfieldii subsp. angustifolia, Eremophila glabra, and Dodonaea lobulata on red/brown clay loams and sandy loams in drainage lines and areas; and

**A2:** Scrub of Acacia aneura var. intermedia, Acacia ayersiana and Grevillea nematophylla with emergent Eucalyptus oleosa subsp. oleosa and Casuarina pauper over a low shrubland of Acacia burkittii, Acacia tetragonophylla, Acacia ramulosa var. ramulosa, Scaevola spinescens, Dodonaea lobulata, Dodonaea rigida, Spartothamnella teucriiflora and Ptilotus obovatus on red clay loam flats and wash plains sometimes with a mantle of ironstone and calcrete pebbles (Mattiske, 2010).

#### Whirling Dervish (CPS 2871/1)

Acacia casuarina shrubland (CCAS): Very gently undulating plains to level plains with shallow calcareous red earths over calcrete supporting scattered to moderately close tall shrublands or woodlands of *Casuarina pauper* (*cristata*) with Acacia aneura and A. burkittii, and

Plains mixed halophyte low shrublands (PXHA): Broad alluvial plains with texture contrasting soils, often hardpan with generally scattered low shrublands of *Acacia aneura* and other *Acacia* spp. over mosaics of sometimes dense mid shrubs including *Cratystylis subspinescens*, *Maireana pyramidata* and other chenopods.

#### **Clearing Description**

#### Carosue Dam Expansion.

Nothern Star (Carosue Dam) Pty Ltd proposes to clear up to 375 hectares of native vegetation within a boundary of approximately 1,567 hectares, for the purposes of mineral production and associated activities. The project is located approximately 105 kilometres north-east of Kalgoorlie in the Shire of Menzies and City of Kalgoorlie-Boulder. Vegetation Condition Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery, 1994).

to:

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

Comment

The vegetation condition was derived from considering previous vegetation surveys done on the underlying existing native vegetation clearing permits. It is noted that these observations were conducted before commencement of clearing so it would be reasonable to assume that the vegetation condition most likely has deteriorated since the initial surveys were undertaken.

The proposed clearing of 375 hectares is for potential growth of the Karari and Whirling Dervish mine operations and potential expansion of mining related infrastructure including the existing core farm, roads and power reticulation corridors.

Four existing clearing permits are underlying this application; CPS 2871/1, CPS 3833/2, CPS 4150/1 and CPS 5426/2. CPS 8000/1 is an amalgamation of the remaining granted clearing capacity of each underlying existing clearing permit. Tenements relevant to the application remain unchanged to the underlying existing clearing permits (Saracen, 2018).

Clearing permit CPS 8000/1 was granted by the Department of Mines, Industry Regulation and Safety on 3 May 2018 and was valid from 26 May 2018 to 31 March 2028. The permit authorised the clearing of up to 375 hectares of native vegetation within a boundary of approximately 1,567 hectares, for the purpose of mineral production and associated activities.

On 15 September 2021, the permit holder applied to amend CPS 8000/1 to remove condition 9 from the permit. The Permit Holder also applied to update the permit holder name, to reflect a company name change.

#### 3. Assessment of application against Clearing Principles

#### Comments

The permit holder has applied to update the permit holder name to Northern Star (Carosue Dam) Pty Ltd, and remove condition 9 from the permit. This condition does not allow the permit holder to clear native vegetation within the areas shaded red on Plan 8000/1. This condition was imposed due to the presence of three active Malleefowl mounds within the application area.

The original assessment of the application area identified evidence of Malleefowl (*Leipoa ocellata*; Threatened – BC Act and EPBC Act). Holm (2012) conducted a targeted Malleefowl survey in November 2012, which covered 680 hectares of native vegetation within the application area. The survey identified tracks, three active and three 'long abandoned' nests, and two birds were sighted within the survey area (Holm, 2012).

Since the original assessment, a targeted Malleefowl survey was undertaken over the application area in June 2021. No Malleefowl or tracks were recorded, however, 21 Malleefowl nesting mounds were recorded (Holm, 2021). Of these, ten were likely to have been unused for more than 20 years, three were classified as 'recently failed', four appeared to have been used within the past five to ten years but were now abandoned (classified as 'recently abandoned') and four had been used within the past five years but were not currently occupied ('recently potentially active') (Holm, 2021).

DBCA (2022) advise that no particular population or general area can be described as of greater importance for the long-term survival of Malleefowl, however it appears that this species has a preference for the local area. Breeding Malleefowl tend to be sedentary, nesting in the same general area year after year (DBCA, 2022). There is a lack of vegetation survey information for the areas outside the application area, therefore it is difficult to confirm habitat suitability, in particular, breeding habitat for the species. Clearing the existing Malleefowl mounds for the expansion of a tailings storage facility is not likely to have a significant impact on the widely dispersed Malleefowl population in this region, however it will have an impact on a small number of local individuals (DBCA, 2022). Potential impacts to Malleefowl as a result of the proposed clearing may be minimised by the implementation of a fauna management condition, which requires the applicant to not clear any active Malleefowl mounds during the breeding season (September – January).

The amendment application has been assessed against the clearing principles, planning instruments and other matters in accordance with s.510 of the *Environmental Protection Act 1986*. Environmental information has been reviewed, and the assessment of the proposed clearing against the clearing principles remains consistent with the assessment contained in decision report CPS 8000/1.

Methodology	DBCA (2022)
	Holm (2012)
	Holm (2021)

GIS Database: - DPaW Tenure - Hydrography, Lakes - Hydrography, Linear - IBRA Australia

- Imagery
- Landsystem Rangelands
- Pre-European Vegetation
- Public Drinking Water Source Areas
- Soils, Statewide
- Threatened and Priority Ecological Communities boundaries
- Threatened and Priority Ecological Communities buffers
- Threatened and Priority Flora
- Threatened Fauna

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

#### Comments

There is one native title claim over the area under application (DPLH, 2022). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are four registered Aboriginal Sites of Significance within the application area (DPLH, 2022). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of Water and Environmental Regulation and the Department of Biodiversity, Conservation and Attractions, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

The amendment application was advertised on 24 July 2021 by the Department of Mines, Industry Regulation and Safety inviting submissions from the public. No submissions were received in relation to this application.

On 29 September 2021 the application was determined to be a controlled action under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) for the following controlling provisions: Listed Threatened Species and Communities (sections 18 and 18A) (Malleefowl (*Leipoa ocellata*). The proposal is currently under assessment.

## Methodology DPLH (2022)

#### 4. References

Alexander Holm & Associates (Holm) (2010) Proposed Expansion of Whirling Dervish Mine, Report prepared for Saracen Gold Mine Pty Ltd, by Alexander Holm & Associates, 2010.

- Alexander Holm & Associates (Holm) (2012) Environmental Assessment: Tailings Storage Facility Expansion. Report prepared for Saracen Gold Mine by Alexander Holm & Associates, December 2012.
- Alexander Holm & Associates (Holm) (2021) Impacts on Malleefowl of land clearing associated with expansion of Carosue Dam TSF. Prepared for Northern Star Resources Limited, by Alexander Holm & Associates, August 2021.
- DBCA (2022) Advice received in relation to Clearing Permit Application CPS 8000/2. Species and Communities Branch, Department of Biodiversity, Conservation and Attractions, Western Australia, January 2022.

DPLH (2022) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage.

https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS (Accessed 21 February 2022).

Holm (2010) Proposed Expansion of Whirling Dervish Mine, Report prepared for Saracen Gold Mine Pty Ltd, by Alexander Holm & Associates, 2010.

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

Mattiske (2010) Flora and Vegetation Survey of the Karari Pit Extension. Report prepared for Saracen Gold Mines Pty Ltd, by Mattiske Consulting Pty Ltd, June 2010.

Saracen (2018) Carosue Dam Expansion - Clearing Permit Application - Supporting Information, Saracen Gold Mines Pty Ltd, February 2018.

## 5. Glossary

## Acronyms:

BC Act	Biodiversity Conservation Act 2016, Western Australia
ВоМ	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia (now DPLH)
DAFWA	Department of Agriculture and Food, Western Australia (now DPIRD)
DAWE	Department of Agriculture, Water and the Environment, Australian Government
DBCA	Department of Biodiversity, Conservation and Attractions, Western Australia
DER	Department of Environment Regulation, Western Australia (now DWER)

DMIRS DMP DoEE DoW DPaW DPIRD	Department of Mines, Industry Regulation and Safety, Western Australia Department of Mines and Petroleum, Western Australia (now DMIRS) Department of the Environment and Energy (now DAWE) Department of Water, Western Australia (now DWER) Department of Parks and Wildlife, Western Australia (now DBCA) Department of Primary Industries and Regional Development, Western Australia
DPLH	Department of Planning, Lands and Heritage, Western Australia
DRF	Declared Rare Flora (now known as Threatened Flora)
DWER	Department of Water and Environmental Regulation, Western Australia
EP Act	Environmental Protection Act 1986, Western Australia
EPA	Environmental Protection Authority, Western Australia
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Federal Act)
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
PEC	Priority Ecological Community, Western Australia
RIWI Act	Rights in Water and Irrigation Act 1914, Western Australia
TEC	Threatened Ecological Community

## **Definitions:**

{DBCA (2019) Conservation Codes for Western Australian Flora and Fauna. Department of Biodiversity, Conservation and Attractions, Western Australia}:-

## T <u>Threatened species:</u>

Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the *Biodiversity Conservation Act 2016* (BC Act).

**Threatened fauna** is that subset of 'Specially Protected Fauna' listed under schedules 1 to 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for Threatened Fauna.

*Threatened flora* is that subset of 'Rare Flora' listed under schedules 1 to 3 of the *Wildlife Conservation (Rare Flora) Notice 2018* for Threatened Flora.

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 in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines".

Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines. Published under schedule 1 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for critically endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for critically endangered flora.

## EN Endangered species

Threatened species considered to be "facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines".

Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines. Published under schedule 2 of the *Wildlife Conservation* (Specially Protected Fauna) Notice 2018 for endangered fauna or the *Wildlife Conservation* (Rare Flora) Notice 2018 for endangered flora.

## VU Vulnerable species

Threatened species considered to be "facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines".

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines. Published under schedule 3 of the *Wildlife Conservation* (Specially Protected Fauna) Notice 2018 for vulnerable fauna or the *Wildlife Conservation* (Rare Flora) Notice 2018 for vulnerable flora.

## Extinct Species:

## EX Extinct species

Species where "there is no reasonable doubt that the last member of the species has died", and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).

Published as presumed extinct under schedule 4 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for extinct fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for extinct flora.

#### EW Extinct in the wild species

Species that "is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form", and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).

Currently there are no threatened fauna or threatened flora species listed as extinct in the wild. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.

#### Specially protected species:

Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection.

Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.

#### MI Migratory species

Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

Includes 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 fauna subject to the *Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

Published as migratory birds protected under an international agreement under schedule 5 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018.* 

#### CD Species of special conservation interest (conservation dependent fauna)

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).

Published as conservation dependent fauna under schedule 6 of the *Wildlife Conservation* (Specially Protected Fauna) Notice 2018.

## OS Other specially protected species

Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

Published as other specially protected fauna under schedule 7 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018.* 

## P <u>Priority species:</u>

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora.

Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species 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.
- (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened 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 the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.