

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6837/1

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Aragon Resources Pty Ltd

1.3. Property details

Property: Mining Lease 52/95

Mining Lease 52/96 Mining Lease 52/99 Mining Lease 52/132 Mining Lease 52/133

Local Government Area: Shire of Meekatharra

Colloquial name: Fortnum Gold Mine Project

1.4. Application

Clearing Area (ha) No. Trees Method of Clearing For the purpose of:

400 Mechanical Removal Mineral Production and Associated Activities

1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 30 December 2015

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. The following two Beard vegetation associations are located within the application area (GIS Database):

18: Low woodland; mulga (Acacia aneura); and

29: Sparse low woodland; mulga, discontinuous in scattered groups.

A Level 1 flora and vegetation survey conducted by Umwelt (2012) from 7 to 10 May 2015 identified five vegetation types within the application area:

- **S1** Isolated tall shrubs of *Acacia kempeana*, *A. pruinocarpa*, *A. tetragonophylla* and *Grevillea berryana* over low sparse shrubland of *Ptilotus obovatus* and *Solanum lasiophyllum* over low sparse grassland of *Aristida contorta* and *Eriachne pulchella* subsp. *dominii*. This community occurs on stony hardpan plains;
- **S2** Tall sparse shrubland of *Acacia aptaneura* and *A. aneura* with *A. citrinoviridis, A. tetragonophylla* and *A. kempeana* over low sparse shrubland of *Eremophila forrestii* subsp. *forrestii, E. galeata, E. georgei, E. glutinosa, Ptilotus obovatus* and *Solanum lasiophyllum* over low sparse grassland of *Aristida contorta* and *Eriachne pulchella* subsp. *dominii*. This community occurs on hardpan plains;
- **M1** Low woodland to low open woodland of *Acacia aptaneura* and *A. aneura* with *A. pruinocarpa* and *A. citrinoviridis* over low sparse shrubland of *Eremphila forrestii* subsp. *forrestii* and *Ptilotus obovatus* over low sparse grassland of *Digitaria brownie* and *Aristida contorta*. This community occurs on deeper soils on hardpan plains;
- **M2** Open low woodland of *Acacia aptaneura* with *Grevillea berryana* over low sparse shrubland of *Ptilotus obovatus, Solanum lasiophyllum, Eremphila georgei* and *E. jucunda* subsp. *jucunda* over low sparse grassland of *Aristida contorta* and *Eriachne pulchella* subsp. *pulchella*. This community occurs on minor drainage areas on hardpan plains;
- C1 Open low woodland of *Acacia cyperophylla* subsp. *cyperophylla* over tall open shrubland of *A. aptaneura* over low sparse shrubland of *Eremiphila galeata*, *A. tetragonophylla* and *G. deflexa* over low sparse grassland of *Eriachne helmsii*, *E. pulchella* subsp. *dominii* and *Sporobolus australasicus*. This community occurs on ephemeral creeks: and

D - Disturbed/Cleared land.

Clearing Description

Fortnum Gold Mine Project.

Aragon Resources Pty Ltd proposes to clear up to 400 hectares of native vegetation within a total boundary of approximately 973 hectares, for the purposes of mineral production and associated activities. The project is located approximately 138 kilometres north of Meekatharra, in the Shire of Meekatharra.

Page 1

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 has been interpreted by Umwelt (2012).

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 Augustus subregion of the Gascoyne Interim Biogeographic Regionalisation of Australia (IBRA) bioregion (GIS Database). This subregion is characterised by Mulga woodland with *Triodia* occur on shallow stony loams on rises, while the shallow earthy loams over hardpan on the plains are covered by Mulga parkland (CALM, 2002).

The flora and vegetation survey by Umwelt (2012) identified a total of 101 flora taxa representing 26 families and 59 genera. Species composition and vegetation types within the application area are typical of the local region and not considered to be unusually diverse (Umwelt, 2012). The application area has been extensively grazed and subject to disturbance by cattle, goats, rabbits and camels. The application area is immediately adjacent to existing mine site infrastructure (GIS Database). The area proposed to be cleared is not considered to be remnant vegetation (GIS Database).

A search of the Department of Parks and Wildlife's Threatened and Priority Flora databases revealed no records of Threatened Flora species, and three Priority Flora species within a 5 kilometre radius of the application area (DPaW, 2015). The flora and vegetation survey by Umwelt (2012) did not identify any Threatened or Priority flora species or Threatened Ecological Communities within the application area. The application area sits within the buffer of the Priority Ecological Community (PEC) 'Robinson Range vegetation complexes (Banded Ironstone Formation)', however Umwelt (2012) did not record any banded iron formations or associated vegetation complexes associated with the PEC.

No weed species were identified by Umwelt (2012) within the application area, however Bippinate Beggartick (*Bidens bipinnata*) and Buffel grass (*Cenchrus ciliaris*) were identified in the local area. 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.

There are six fauna habitat types recorded within the application area by Rapallo (2012). All faunal habitats within the application area are considered to be common and widespread within the subregion and faunal assemblages are unlikely to be different to those found in similar habitat located elsewhere in the region (GIS Database).

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

Methodology

CALM (2002)

DPaW (2015)

Rapallo (2012)

Umwelt (2012)

GIS Database

(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

A Level 1 terrestrial fauna survey was conducted over the application area from 25 to 28 May 2012 by Rapallo Environmental (Rapallo) (2012) which mapped six habitat types within the application area:

- S1 Isolated tall shrubs of *Acacia kempeana*, *A. pruinocarpa*, *A. tetragonophylla* and *Grevillea berryana* over low sparse shrubland of *Ptilotus obovatus* and *Solanum lasiophyllum* over low sparse grassland of *Aristida contorta* and *Eriachne pulchella* subsp. *dominii*;
- S2 Tall sparse shrubland of *Acacia aptaneura* and *A. aneura* with *A. citrinoviridis*, *A. tetragonophylla* and *A. kempeana* over low sparse shrubland of *Eremophila forrestii* subsp. *forrestii*, *Eremophila galeata*, *E. georgei*, *E. glutinosa*, *Ptilotus obovatus* and *Solanum lasiophyllum* over low sparse grassland of *Aristida contorta* and *Eriachne pulchella* subsp. *dominii*;
- S3 Tall sparse shrubland of *Acacia aptaneura* and *A. citrinoviridis* over low sparse shrubland of *Thryptomene decussate* over low sparse grassland of *Aristida contorta*;

M1 – Low woodland to low open woodland of *Acacia aptaneura* and *A. aneura* with *A. pruinocarpa* and *A. citrinoviridis* over low sparse shrubland of *Eremophila forrestii* subsp. *forrestii* and *Ptilotus obovatus* over low sparse grassland of *Digitaria brownie* and *Aristida contorta*;

M2 – Open low woodland of *Acacia aptaneura* with *Grevillea berryana* over low sparse shrubland of *Ptilotus obovatus, Solanum lasiophyllum, Eremophila georgei* and *E. jucunda* subsp. *jucunda* over low sparse grassland of *Aristida controrta* and *Eriachne pulchella* subsp. *pulchella*;

C1 – Open low woodland of *Acacia cyperophylla* subsp. *cyperophylla* over tall open shrubland of *A. aptaneura* over low sparse shrubland of *Eremophila galeata*, *A. tetragonophylla* and *Grevillea deflexa* over low sparse grassland of *Eriachne helmsii*, *E. pulchella* subsp. *dominii* and *Sporobolus australasicus*; and

D - Disturbed/Cleared land.

Rapallo (2012) noted that the survey area, which includes the application area, was highly disturbed, with the majority of the survey area showing severe degradation of the understorey due to the presence of cattle. The habitat types found within the application area are considered as being well represented in the local region and the application area does not contain habitats or faunal assemblages that are ecologically significant (Rapallo, 2012). An ephemeral watercourse (associated with M2 and C1 habitat types) has the potential to provide habitat for conservation significant fauna. This watercourse have been degraded through cattle and existing mining activities within the area (GIS Database). The fauna assemblage of the study area is considered common and typical of the region and is not specifically dependent on the habitats within the application area.

The faunal survey did not identify any species of conservation significance within the application area (Rapallo, 2012). Rapallo (2012) identified five bird species of local significance which may be impacted by the proposed clearing. These birds could potentially use the application area and adjoining areas for foraging, roosting and possibly breeding; however given the high mobility of these species, it is not likely that the proposed clearing will significantly impact the conservation significance of this species.

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

Methodology

Rapallo (2012) GIS Database

(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, there are no known records of Threatened Flora within the application area (GIS Database). A search of the Department of Parks and Wildlife's Threatened and Priority Flora databases identified no Threatened Flora species as occurring within a 10 kilometre radius of the application area (DPaW, 2015).

Based on flora and vegetation surveys conducted by Umwelt (2012), no Threatened Flora species were recorded within the application area.

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

Methodology

DPaW (2015) Umwelt (2012) GIS Database

(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

Proposal is not likely to be at variance to this Principle

According to available databases, there are no known Threatened Ecological Communities (TECs) within the application area (GIS Database). The nearest known TEC is approximately 255 kilometres north east of the application area (GIS Database).

No TECs were recorded during the vegetation survey (Umwelt, 2012).

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

Methodology

Umwelt (2012) GIS Database

(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 areas fall within the Gascoyne Interim Biogeographic Regionalisation of Australia bioregion (GIS Database). The vegetation within the application areas is recorded as:

18: Low woodland; mulga (Acacia aneura); and

29: Sparse low woodland; mulga, discontinuous in scattered groups (GIS Database).

The above Beard vegetation associations retain approximately 99% or above of their pre-European extent at both the state and bioregion level (Government of Western Australia, 2014). The areas proposed to be cleared are not a significant remnant of native vegetation.

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

Methodology Government of Western Australia (2014)

GIS Database

(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 at variance to this Principle

There is one ephemeral watercourse within the application area known as Yarlarweelor Creek where it has been realigned for the Yarlarweelor open pit. This creek only flows in periods of high rainfall (Umwelt, 2012).

Vegetation mapping of the application area identified one riparian vegetation type growing in association with Yarlarweelor Creek (vegetation type C1). This vegetation type is dominated by *Acacia cyperophylla* (Umwelt, 2012). Grazing impacts were observed along the creek and has resulted in a reduction of understorey cover. Vegetation type M2 was also identified on minor drainage areas on hardpan plains (Umwelt, 2012). Potential impacts to riparian vegetation as a result of the proposed clearing may be minimised by the implementation of a vegetation management condition.

A vegetation condition assessment of Yarlarweelor Creek and its associated tributary was undertaken on 4 to 6 June 2012 to assess current and proposed impacts to riparian vegetation from the existing and proposed creek realignment (Umwelt, 2012). Historical and current grazing pressures were observed in all transects (two transects are located within the application area) (Umwelt, 2012). According to Umwelt (2012), there was no visible difference in condition between transects upstream and downstream of the existing creek realignment suggesting that no significant impacts to the creek system will occur as a result of the proposed realignment.

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

Methodology Umwelt (2012)

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

Comments Proposal may be at variance to this Principle

The application area has been mapped as occurring on the Durlacher, Horseshoe, Jamindie and Three Rivers land systems (GIS Database). The Durlacher land system consists of stony plains, lower tributary drainage plains and low stony rises, supporting scattered tall shrublands of mulga and other Acacias. In some areas pasture degradation has led to serious erosion by sheeting and gullying (Payne et al., 1987). The Horseshoe land system consists of gently undulating stony plains and low rounded hills and is generally not susceptible to erosion (Curry et al., 1994). The Jamindie land system consists of stony hardpan plains and rises supporting groved mulga shrublands, occasionally with spinifex understory. Drainage tracts are moderately susceptible to erosion, some hardpan plains are slightly susceptible and other parts are inherently resistant (Van Vreeswyk et al., 2004). The Three Rivers land system consists of broad hardpan plains with minor sandy banks and sparse Mulga shrublands. Sandy banks can be susceptible to erosion (Payne et al., 1988). Potential impacts from erosion as a result of the proposed clearing may be minimised by the implementation of a staged clearing condition

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

Methodology Curry et al. (1994)

Payne et al. (1987) Payne et al. (1988)

Van Vreeswyk et al. (2004)

GIS Database

(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 not located within any conservation area (GIS Database). The nearest conservation area, Collier Range National Park, is located approximately 70 kilometres northwest of the application area (GIS Database).

Given the distance of the application area from Collier Range National Park, the proposed clearing is not likely to provide a significant ecological linkage or fauna movement corridor and is not likely to impact the environmental values of the conservation area.

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

Methodology GIS Database

(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 located within a Public Drinking Water Source Area (GIS Database). The application area is located within the proclaimed East Murchison groundwater area under the *Rights in Water and Irrigation Act 1914* (GIS Database). Any groundwater extraction and/or taking or diversion of surface water for the purposes other than domestic and/or stock watering is subject to licence by the Department of Water.

The annual evaporation rate exceeds the annual average rainfall for local area (BoM, 2015; GIS Database). Any surface water within the application area is likely to only remain for short periods following significant rainfall events. The proposed clearing is not likely to cause deterioration in the quality of any surface water within or outside of the application area.

There are no permanent waterbodies or watercourses within the application area, however, Yarlarweelor Creek, a significant stream and ephemeral watercourse, occurs within the application area (GIS Database). This creek only flows in periods of high rainfall (Umwelt, 2012). The banks along Yarlarweelor Creek may be susceptible to erosion and evidence of siltation has been observed within and upstream of the project area (Umwelt, 2012). Potential impacts from erosion as a result of the proposed clearing may be minimised by the implementation of a staged clearing condition.

A vegetation condition assessment of transects upstream and downstream of the existing creek realignment found there was no discernable difference in vegetation condition suggesting that no significant impacts to the creek system will occur as a result of the proposed realignment (Umwelt, 2012). A Permit to Obstruct or Interfere has been issued by the Department of Water for the proposed creek realignment. This permit requires that the realignment works do not result in upstream water ponding and requires rehabilitation of sites affected by construction or removal activities. Umwelt (2012) states the realignment is unlikely to alter the current flow of surface water or exacerbate local erosion or sedimentation. Potential impacts to Yarlarweelor Creek as a result of the proposed clearing may be minimised by the implementation of a vegetation management condition.

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

Methodology BoM (2015)

Umwelt (2012) GIS Database

(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 239.2 millimetres and an average annual evaporation rate of between 3,200 and 3,600 millimetres there is likely to be little surface flow during normal seasonal rains (BoM, 2015; GIS Database). Whilst large rainfall events may result in flooding of the area, the proposed clearing is not likely to lead to an increase in incidence or intensity of flooding.

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

Methodology BoM (2015)

GIS Database

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

Comments

There is one Native Title claim over the area under application (Department of Aboriginal Affairs, 2015; GIS Database). 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 no registered Aboriginal Sites of Significance within the application area (Department of Aboriginal Affairs, 2015). 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 30 November by the Department of Mines and Petroleum inviting submissions from the public. One submission was received advising no comments or objections to the proposed clearing.

Methodology Department of Aboriginal Affairs (2015)

4. References

BoM (2015) Climate Statistics for Australian Locations. A Search for Climate Statistics for Three Rivers Aero, Australian Government Bureau of Meteorology, viewed 18 December 2015, http://reg.bom.gov.au/climate/averages/tables/cw 007080.shtml>.

CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Department of Conservation and Land Management, Western Australia.

Curry, P.J., Payne, A.L., Leighton, K.A., Hennig, P. and Blood, D.A. (1994) An Inventory and Condition Survey of the Murchison River Catchment and Surrounds, Western Australia.

Department of Aboriginal Affairs (2015) Aboriginal Heritage Enquiry System. Government of Western Australia, viewed 18 December 2015 http://maps.dia.wa.gov.au/AHIS2/>.

DPaW (2015) NatureMap Department of Parks and Wildlife, viewed 18 December 2015 http://naturemap.dec.wa.gov.au. Government of Western Australia (2014) 2014 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2014. 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.

Payne, A.L., Curry, P.J. and Spencer, G.F. (1987) An Inventory and Condition Survey of Rangelands in the Carnarvon Basin, Western Australia. Department of Agriculture, Western Australia.

Payne, A. L., Mitchell A. A. and Holman, W.F. (1988) An inventory and condition survey of the rangelands in the Ashburton River Catchment, Western Australia. Department of Agriculture, Western Australia, Technical Bulletin 62, revised edition 1988.

Rapallo (2012) Level 1 Fauna Survey of Fortnum Gold Mine. Prepared for Grosvenor Gold Pty Ltd, July 2012.

Umwelt (2012) Level 1 Flora and Vegetation Survey and Creek Vegetation Condition Assessment – Mining Leases (M) 52/95, 52/96, 52/99, 52/132, 52/133 and Exploration Licence E 52/1659. Prepared for Grosvenor Gold Pty Ltd, November 2012.

Van Vreeswyk, A.M.E., & Payne, A.L. & Leighton, K.A. & Hennig, P (2004) An inventory and condition survey of the Pilbara region, Western Australia. Department of Agriculture, Western Australia.

5. Glossary

Acronyms:

BoMBureau of Meteorology, Australian GovernmentDAADepartment of Aboriginal Affairs, Western AustraliaDAFWADepartment of Agriculture and Food, Western Australia

DEC Department of Environment and Conservation, Western Australia (now DPaW and DER)

DER Department of Environment Regulation, Western Australia
DMP Department of Mines and Petroleum, Western Australia

DRF Declared Rare Flora

DotE Department of the Environment, Australian Government

DoW Department of Water, Western Australia

DPaW Department of Parks and Wildlife, Western Australia

DSEWPaC Department of Sustainability, Environment, Water, Population and Communities (now DotE)

EPA Environmental Protection Authority, Western Australia
EP Act Environmental Protection Act 1986, Western Australia

EPBC Act Environment Protection and Biodiversity Conservation Act 1999 (Federal Act)

GIS Geographical Information System
ha Hectare (10,000 square metres)

IBRA Interim Biogeographic Regionalisation for Australia

IUCN International Union for the Conservation of Nature and Natural Resources – commonly known as the

World Conservation Union

PEC Priority Ecological Community, Western Australia

RIWI Act Rights in Water and Irrigation Act 1914, Western Australia

TEC Threatened Ecological Community

Definitions:

{DPaW (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)

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.